



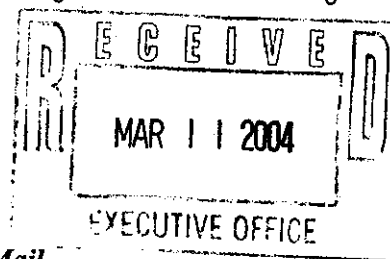
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COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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Via Facsimile and U.S. Mail

Mr. Arthur G. Baggett, Jr., Chair
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812

Dear Mr. Baggett:

Comments Regarding the State Water Resources Control Board's "Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List and Draft Functional Equivalent Document" (Dated December, 2003)

The County Sanitation Districts of Los Angeles County (Districts) are pleased to provide you with comments regarding the State Water Resources Control Board's (SWRCB) draft "Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List and Draft Functional Equivalent Document" (Dated December, 2003) (Draft Listing Policy and Draft FED).

The Districts are a consortium of independent special districts serving the wastewater and solid waste management needs of over 5 million people and 3,300 industries in Los Angeles County, California. The Districts serve 78 cities and unincorporated areas within the County. We currently operate and maintain over 1,300 miles of trunk sewers and 11 wastewater treatment plants that collectively treat over 500 million gallons per day of wastewater. Of the 11 wastewater treatment plants, 7 discharge to inland surface waters, and 1 discharges to the Pacific Ocean (on the Palos Verdes Shelf). A number of these waters are listed on the 303(d) list for various constituents. The Districts have worked with the Los Angeles Regional Water Quality Control Board (Regional Board) and U.S. EPA (USEPA) on several TMDL's affecting these waters. The Districts have also witnessed the evolution of the 303(d) list, and have commented on many versions of the list over the past 10 years, and therefore we believe that we bring a local perspective and extensive experience with both the listing process and the TMDLs that have resulted from it.

In the past, the Districts have observed listings made using a variety of assessment methodologies, applying varying degrees of data quality and quantity thresholds, utilizing various types of data, ranging from visual observations, to one-time studies, to water quality data from discharger monitoring reports.

The Districts endorse a standardized statewide approach to listing waters that balances environmental protection with technical and scientific integrity, and we think the SWRCB's Draft Listing Policy goes a long way towards achieving that approach. The Draft Listing Policy makes significant steps towards clearly identifying the beneficial uses being impacted, as well as the standard that is to be evaluated. Many aspects of the Draft Listing Policy provide a solid framework for listing and de-listing California's surface waters, including the data quality and quantity requirements, requirements for consistent and statistically valid data evaluations, and the implementation provisions.

The Districts believe that while the Draft Listing Policy outlines a methodology that strives to produce a consistent and scientifically valid basis for listing and de-listing water segments, it also provides the SWRCB and the Regional Boards with sufficient flexibility to address water bodies of concern on a case-by-case basis, when it is determined that provisions under the Draft Listing Policy do not appropriately address these concerns. For example, the alternate data evaluation provisions, though they should not be relied upon as a substitute for the technical rigor required by the Policy, do allow the SWRCB and Regional Boards a mechanism to address water segments where the standardized provisions of the Draft Listing Policy would not otherwise appropriately address site-specific conditions.

The Districts have specific comments that address several aspects of the Draft Listing Policy, that indicate areas where we believe the technical validity of the Draft Listing Policy can be improved.

Structure of the Section 303(d) List

A major concern is the SWRCB's movement away from an "integrated" water quality assessment report format, as included in the July 2003 *Draft Policy for Guidance on Assessing California Surface Waters*, toward the "single list" structure proposed in the December 2003 Draft Listing Policy. Under the new Draft Listing Policy, there are no Monitoring, Planning, Pollution, Standards Fully Attained or Standards Partially Attained Lists, and no list separate from the 303(d) List for TMDLs Completed or Enforceable Programs. Under the Draft Listing Policy, waters placed in the Enforceable Programs category will be assigned a low priority and will not be scheduled for TMDL development, but will still appear on the 303(d) list. The Districts are concerned with the newly proposed structure of the 303(d) list. Several impairments in water segments to which the Districts discharge were justifiably moved to the Enforceable Program List, due to NPDES permit requirements and associated treatment plant upgrades that have addressed the impairment. Had this not been done, a TMDL would have been required by March 2004, due to the Los Angeles region consent decree. Under the new Draft Listing Policy, these waters would once again be placed on the 303(d) list, and the manner in which these waters will now be addressed is uncertain. At a minimum, valuable resources will be tied up in addressing this situation, which could be better directed toward water quality issues that have not received sufficient attention.

We recommend that the SWRCB revise the Policy to include on the 303(d) list only those waters for which water quality standards are not attained and for which a TMDL is required. Other categories of waters, such as those with TMDLs already completed, with enforceable programs in place to bring the water into attainment, or where the impairment is not due to a pollutant, should be placed on separate lists, instead of on the 303(d) list. The current proposal is problematic specifically because of the implications of placing waters on the list (e.g., that a TMDL must be completed, interim permitting issues, etc.). It is also unclear what will happen to waters that are currently listed on the 2002 Monitoring List (the Districts also discharge to a water segment that was placed on the 2002 Monitoring List).

In this regard, the Districts strongly support the re-establishment of a "planning/monitoring" list, separate from the 303(d) list, as was included as part of the July 2003 preliminary Draft Policy and which was established during the 2002 listing cycle. A planning/monitoring list is important for cases where the

cause of impairments are undetermined (e.g., unknown toxicity), cases where impairments are due to "pollution" rather than "pollutants", cases where data are insufficient to determine if impairment exists, and cases where water quality standards may be inappropriate. All water bodies on the planning/monitoring list would need to be further studied before being placed on the 303(d) list, if impaired, or de-listed, if standards are attained.

Review of the Existing Section 303(d) List

Ideally, the Districts would recommend the SWRCB adopt Alternative 1 of the Draft FED (pg. 189) regarding the review of the existing 303(d) list, and incorporate a requirement to revise the existing list so it is consistent with the Listing/Delisting Policy. However, the Districts understand that reassessing all existing listings presents a significant burden on the SWRCB, at a time when resources are very limited, and therefore we support the SWRCB's recommendation to establish an application process, whereby an interested party can request that an existing listing be reassessed under the provisions of the Draft Listing Policy. We strongly recommend, however, that the SWRCB modify this provision to allow re-evaluations to occur for all existing listings upon request, whether or not new data and information are available, where the applicant makes a prima facie case that the listing is inappropriate or would not qualify under the new Listing Policy. The Districts believe that if an existing listing does not meet the requirements for listing under the provisions of the new Listing Policy, that listing does not belong on the 303(d) list.

To demonstrate the need for re-evaluations of this type, we offer the example of the algae listings for several water segments in the San Gabriel River watershed, that were listed as impaired in 1996. The original impairment determinations were derived from the Regional Board's "Aesthetic Stressors" worksheet. The observations were conducted on a limited basis (no more than 3-5 occasions), and by one individual. There was no quantification of the amount of algae observed, nor was any attempt made to ensure spatial and temporal representativeness within water segments. Subjective observations resulted in rankings of "slight," "moderate," and "high" amounts of algae growth, with moderate and high rankings resulting in an exceedance. The observation sheets raised several important questions, including what amount of algae constitutes impairment, what beneficial use was impaired, and how the amounts of algae growth were estimated. To the Districts' knowledge, studies to determine the causes of algal growth, as well as the level at which algal growth might be considered problematic, have not been conducted, yet the water bodies remain on the 303(d) list. Section 3.1 of the Draft Listing Policy specifies that "Visual assessments or other semi-quantitative assessments may not be used as the sole line of evidence to support a 303(d) listing." Therefore, existing listings that were originally placed on the 303(d) list based on this type of information, like the algae listings in the San Gabriel River watershed, should be re-evaluated, and be removed from the 303(d) list if it is in fact determined that the water body was originally listed using only visual or semi-quantitative information. Other listings included on previous 303(d) lists may also be inappropriate because of inadequate data quantity or quality, evidence that natural sources have caused or contributed to the impairment, and/or water quality standards upon which listings were based are inappropriate.

Water/Sediment Toxicity

As with the July 2003 Draft Policy, the Districts are very concerned about guidelines under Section 3.1.6 of the Draft Listing Policy that allow for the placement of water segments on the 303(d) list for toxicity alone. The Draft Assessment Policy states, "If the pollutant has not been identified, studies identifying the pollutant causing or contributing to the toxicity shall be completed prior to the development of a TMDL." (Draft Listing Policy at p. 4)

We do not believe it makes sense to list a water body for toxicity, unless it can be shown that the toxicity is statistically significant and persistent, and associated with an identified pollutant. All of these conditions need to be met in order to successfully develop a TMDL for toxicity. If there is some doubt that "a" pollutant, or "which" pollutant, is causing toxicity, the water should not be placed on the 303(d) list, since toxicity alone reflects a condition of the water body, and not a pollutant for which a TMDL can be developed. The Districts therefore support the SWRCB adopting a weight of evidence approach for evaluating toxicity listings, as is outlined under Alternative 3 of the Draft FED (Draft FED, pg. 109), and support elimination of Alternative 2 (using toxicity alone as a listing factor), from the SWRCB's recommended alternatives.

A specific example of the need to establish persistent toxicity and the pollutant causing the toxicity before a water segment is listed exists in the San Gabriel River watershed. Several reaches in the San Gabriel River watershed were listed for toxicity based on a special study conducted for the RWQCB by U.C. Davis in 1992-1993. The cause of the observed toxicity in the study was never identified. The water segments remain on the 303(d) list, and a TMDL for the water bodies is due in March 2004. The Districts and EPA have been collaborating on follow-up toxicity testing in recent months to determine if toxicity is currently persistent in the San Gabriel River watershed. It was originally envisioned that this collaborative testing effort would help to identify the pollutant causing toxicity in the listed reaches. However, in the follow-up testing, no toxicity was observed in Coyote Creek or the San Gabriel River (except as the result of an abnormal operation upset), and for the one water segment that did exhibit toxicity (Walnut Creek), no pollutant could be identified. It is likely that the condition of the watershed ten years ago, and its exhibited toxicity, is not representative of conditions in, or relevant to, the watershed today. However, the water segments remain listed for unknown toxicity and EPA is faced with the problem of developing a scientifically-sound TMDL for waterbody segments with no persistent toxicity. If in conjunction with the original listings, a causal pollutant had been identified, the presence or absence of that pollutant in the watershed now would signify the need or lack of need for a TMDL. However, without that crucial information, it is impossible to proceed with a technically valid TMDL. And, in order to convince EPA that the waters should be delisted, it appears that we must establish that the listed waters are free from statistically significant and persistent toxicity at all times (because the behavior of the mystery pollutant is unknown) – a bar that may be unreasonably high, given the variable nature of toxicity testing.

The Districts disagree that fewer exceedances are acceptable to support a listing for toxicity (e.g., for sample populations less than 10, when 3 or more samples exceed the evaluation guideline, the segment shall be listed). The Draft FED states, "For toxicity testing, fewer samples (e.g., ten samples) are acceptable because these measurements are more persistent and integrative of water quality conditions and longer periods of time. Consequently, a higher false acceptance error rate is acceptable and appropriate for toxicity." As explained above, establishing the persistence of the toxic condition should be one of the requirements for listing. It is very possible that 3 samples exhibiting toxicity may represent sporadic instances of toxicity, rather than persistent conditions. Are 3 consecutive toxic samples required? Three toxic samples from different seasons of the same year? The reliance upon such few samples may make it more difficult to sufficiently represent the temporal characteristics of the water body, or to determine if the conditions are persistent. Such instances would be more appropriately placed on a monitoring or planning list, until the nature of the toxic events, and the associated pollutant, can be better characterized, and to see if a TMDL can even be developed. Lowering the bar for listing is especially problematic if the delisting bar is not also lowered. Under the current Draft Policy, it appears that a minimum of 22 samples would be required with no exceedances in order for delisting to be considered. Clearly, this is not a level playing field.

Bioaccumulation of Pollutants in Aquatic Life Tissue

For placement of a water segment on the 303(d) List, due to bioaccumulation of pollutants in aquatic life tissue (Draft Listing Policy, Section 3.1.5), the Draft Listing Policy only requires 3 exceedances of aquatic life tissue evaluation guidelines for placement on the 303(d) list. In contrast, for water column constituents for sample populations less than 20, 5 or more sample exceedances are required for 303(d) listing. As with the July 2003 Draft Policy, we feel the SWRCB has essentially "lowered the hurdle" for tissue-based listings as compared to water column constituents, and we oppose the use of this as a minimum data requirement.

Although theoretically factors such as bioaccumulation, adverse biological response, and degradation of biological populations and communities may suggest some measure of water segment impairment, the relationship between a pollutant and the impairment is often less clear in these types of measures than it is with water column exceedances. In the case of tissue-based exceedances, the relationship between concentrations in the water column and concentrations in fish tissue may be unclear, and therefore a lower exceedance rate for these types of listings is not justified. Listings based on exceedances of tissue evaluation guidelines, if used at all, should require an established relationship between tissue levels and water column concentrations. Accordingly, we support the SWRCB's guidance to not use Maximum Tissue Residue Levels (MTRLs) and Elevated Data Levels (EDLs) to evaluate shellfish or fish tissue data. Additionally, we recommend that listings for bioaccumulation of pollutants in aquatic life tissue be based on a weight of evidence approach, as is required for the evaluation of adverse biological response and degradation of biological populations and communities.

Adverse Biological Response and Degradation of Biological Populations and Communities

The Districts support the SWRCB's requirement that multiple lines of evidence be evaluated when assessing these listing factors, since these biological responses may be attributed to factors other than exceedances of water quality objectives (e.g., physical habitat limitations, overfishing, disease, or invasive exotic species, none of which are conducive to a TMDL solution).

We also support the Draft Listing Policy's requirement that if adverse biological response or degradation of a biological population is demonstrated, these impacts need to be shown to be associated with water or sediment concentrations of pollutants (Draft Listing Policy, pgs. 5 and 6) in order to be listed. We support the requirement to assess multiple lines of evidence for this listing factor, and urge the SWRCB to exercise caution when evaluating adverse biological response, because, as acknowledged in the Draft FED, "These types of data are typically water body-specific; often are not collected using standard procedures; are usually the result of research projects; and are not part of major ambient monitoring programs." (Draft FED, pg. 126)

Similarly, we support the SWRCB's requirement to use bioassessment data and information only if it is associated with water and sediment measurements, because, as stated in the Draft FED, "Relying on bioassessment data alone does not allow for determination of associated causes and sources of impairments necessary to determine attainment of a beneficial use." (Draft FED, pg. 133). However, the assessment of water bodies based on these listing factors can still be problematic due to the reliance on comparison of the response or community structure to that of a reference condition. Although the Draft FED provides some guidance on how reference sites are to be selected and used, the selection of appropriate reference conditions, particularly for highly urbanized watersheds, is difficult, yet it is critical to the determination of impairment. In some watersheds, minimally impacted or reference conditions may not exist, and therefore a determination would have to be made as to the best attainable or "desired" condition for comparison, before an evaluation of impairment or attainment status could be made. The Draft FED notes that when selecting reference sites, that "Actual sites that represent best attainable

conditions of a water body should be used." (Draft FED, pg. 135) How will the "best attainable condition" for a water body be determined? If a water body is shown to be ecologically limited due to physical habitat factors alone, is that site then considered to be the best attainable condition? Sites where degradation of the biological community is due to physical habitat factors are not suitable for placement on the 303(d) list, since this impact is not due to a pollutant for which a TMDL can be developed.

Also, comparison to reference conditions may be difficult because ecologically one would expect to find more and more differences between the water segment and the reference location as the sample size increases. As more information is collected, differences between the water body in question and the reference site may be due to factors that are not accounted for, such as temperature, soil conditions, and as mentioned above, integrity of the physical habitat, etc. In other words, the reference site may be changing independently from the test site, due to factors other than water quality, however it may appear that the test site is impaired due to differences between it and the reference site.

Conclusions

In closing, we would like to commend the SWRCB for their hard work towards developing a reasonable, scientifically-based approach toward listing and de-listing water segments. We support the SWRCB moving forward with this Policy, and also support the SWRCB in their goal to have the Policy in place before the next update of the 303(d) list is completed. The Districts feel that development of the next 303(d) list according to the provisions of the Listing Policy, as modified based on the recommendations outlined above, will result in a list that is focused on real impairments.

The Districts appreciate the opportunity to provide comments to the SWRCB regarding the Draft Listing Policy. If you have any questions regarding our comments, please contact Sharon Green at (562) 699-7411, extension 2503 or Heather Lamberson at extension 2828.

Very truly yours,

James F. Stahl



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Technical Services Department

VOC:HL:drs

cc: Members, State Water Resources Control Board
Celeste Cantu, Executive Director
Craig J. Wilson, Chief, TMDL Listing Unit, SWRCB