

June 17, 2009

California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street
Los Angeles, CA 90013

ATTN: Man Voong,

SUBJECT: COMMENTS ON THE PROPOSED 2008 303(D) LIST OF WATER QUALITY LIMITED SEGMENTS AND STAFF REPORT

The City of San Buenaventura appreciates the opportunity to comment on the proposed 2008 303(d) list. The focus of the City's comments is bacteriological based listings for beaches on the Ventura County Coast, which fall inside the City limits, and arsenic and toxicity listings in the Santa Clara River Estuary.

Bacteriological Water Quality Listings

The 2008 303(d) list proposes that Promenade Park Beach be listed for bacterial indicators and San Buenaventura Beach not be delisted for bacterial indicators. The City has the following two comments on these listings.

1. For the Promenade Park Beach bacterial indicators listing, the fact sheet shows comparison of exceedances at individual stations to the Listing Policy. Therefore, individual stations, rather than the whole beach, should be listed on the 2008 303(d) list. Only one (1) of the four (4) stations monitored at Promenade Park Beach has bacterial exceedances that meet the Listing Policy criteria for addition to the 2008 303(d) list. There may be specific activities occurring in this part of the beach or attributes of these sampling locations that are resulting in the bacterial exceedances. The City requests that only the station where the exceedances meet the Listing Policy be listed. This would allow us to focus City resources on addressing problematic areas rather than the entire beach. A summary of available data from the RWQCB for each station for the beach is presented in

Table 1. Summary of Exceedances at Promenade Park Beach

	VC14000	VC15000	VC16000	VC17000
# of Single Samples	307	191	195	245
# of Single Samples Exceedances	31	21	24	29
Exceeds Listing Policy?	No	No	No	No
# of Geomeans	49	22	22	32
# of Geomeans Exceedances	9	1	2	3
Exceeds Listing Policy?	Yes	No	No	No

2. For the San Buenaventura Beach bacterial indicators listing, the fact sheet associated with this listing shows comparison of exceedances at individual stations to the Listing Policy. Therefore, individual stations, rather than the whole beach, should not be delisted from the 303(d) list. Only one (1) of the three (3) stations monitored has bacterial exceedances that do not meet the Listing Policy requirements for delisting. There may be specific activities occurring in this part of the beach or attributes of these sampling locations that are resulting in the bacterial exceedances. The City requests that all stations, except the station where the exceedances do not meet the Listing Policy for delisting, be delisted to allow City resources to be focused on addressing problematic areas rather than the entire beach. A summary of available data from the RWQCB for each station for the beach is presented in **Table 2**.

Table 2. Summary of Exceedances at San Buenaventura Beach

	VC18000	VC19000	VC20000
# of Single Samples	288	354	286
# of Single Samples Exceedances	28	67 ^[1]	16
Meets Listing Policy for delisting?	Yes	No	Yes
# of Geomeans	64	76	64
# of Geomeans Exceedances	7	21 ^[2]	5
Meets Listing Policy for delisting?	Yes	No	Yes

1 The factsheet for this listing shows 61 single sample exceedances; however, our data analysis using an exceedance day approach leads to 67 exceedances. This still does not meet the Listing Policy criteria for delisting.

2 The fact sheet for this listing shows 24 geomean exceedances; however, our data analysis using an exceedance day and calendar month geomean exceedance approach leads to 21 exceedances. This still does not meet the Listing Policy criteria for delisting.

Santa Clara River Estuary Arsenic

The 2008 303(d) list proposes listing arsenic in the Santa Clara River Estuary based on nine (9) exceedances out of 63 samples, which meets the Listing Policy criteria for addition to the 303(d) list of impaired waters. However, upon review of the provided data used to assess water quality, the City found only two (2) exceedances of the CTR saltwater criterion maximum concentration of 69 ug/L (0.069 mg/L) out of 63 samples. This does not meet the Listing Policy criteria for addition to the 303(d) list of impaired waters, therefore, the City requests that the Santa Clara River Estuary arsenic listing be removed from the 2008 303(d) list. The data review is presented in Table 3.

Table 3. Santa Clara River Estuary Arsenic Data Provided for 2008 303(d) Listing Process

Station R1		Station R3		Station L5	
Date	As (mg/L)	Date	As (mg/L)	Date	As (mg/L)
12-Feb-02	<0.0020	12-Feb-02	<0.0020	12-Feb-02	<0.0020
07-May-02	<0.0002	07-May-02	<0.0002	07-May-02	<0.0020
06-Aug-02	<0.0020	06-Aug-02	<0.0020	06-Aug-02	<0.0020
05-Nov-02	<0.0020	05-Nov-02	<0.0020	05-Nov-02	<0.0020
11-Feb-03	<0.0020	11-Feb-03	<0.0020	11-Feb-03	<0.0020
06-May-03	<0.0002	03-May-03	0.0814	03-May-03	<0.0020
05-Aug-03	<0.0020	05-Aug-03	<0.0020	05-Aug-03	<0.0020
04-Nov-03	<0.0020	04-Nov-03	<0.0020	04-Nov-03	<0.0020
03-Feb-04	<0.0020	03-Feb-04	<0.0020	03-Feb-04	<0.0020
04-May-04	0.0095	04-May-04	0.0814	04-May-04	0.00814
24-Aug-04	0.0091	03-Aug-04	0.0025	03-Aug-04	0.00536
10-Nov-04	<0.0020	02-Nov-04	0.0067	02-Nov-04	<0.0020
01-Feb-05	<0.0020	01-Feb-05	0.0023	01-Feb-05	<0.0020
03-May-05	<0.0020	03-May-05	<0.0020	03-May-05	<0.0020
10-Aug-05	<0.0020	02-Aug-05	0.0055	09-Aug-05	<0.0020
10-Nov-05	<0.0020	01-Nov-05	<0.0020	10-Nov-05	<0.0020
28-Feb-06	<0.0020	07-Feb-06	0.0123	28-Feb-06	<0.0020
09-May-06	<0.0020	09-May-06	<0.0020	09-May-06	<0.0020
02-Aug-06	<0.0020	02-Aug-06	<0.0020	02-Aug-06	<0.0020
01-Nov-06	<0.0020	01-Nov-06	<0.0020	01-Nov-06	<0.0020
07-Feb-07	<0.0020	06-Feb-07	0.0160	07-Feb-07	<0.0020
Total Data Points		63			
Total Exceedances		2			

Santa Clara River Estuary Toxicity

The proposed 2008 303(d) list includes a listing for toxicity in the Santa Clara River Estuary. The City requests an examination of the appropriateness of the dataset, as well as clarification and procedural changes regarding this listing.

Firstly the City would like to comment that all available toxicity data for the estuary was conducted using freshwater species. An examination of available salinity and hardness data indicate that even in samples with relatively low salinity, significant seawater mixing was occurring resulting in hardness values typically exceeding 1000 mg/L CaCO₃. Therefore, it is most likely that any "toxicity" observed was due to ion imbalance associated with elevated sea water concentrations and not due to toxic compounds. Only toxicity test results conducted using species tolerant of euryhaline conditions or tests conducted with marine species with salinity levels appropriately adjusted would be suitable for evaluating this listing. In the absence of such data, there is not enough suitable data to make a determination whether toxicity is present and should be listed.

Secondly, the fact sheet for this listing describes the toxicity evaluation guideline as follows:

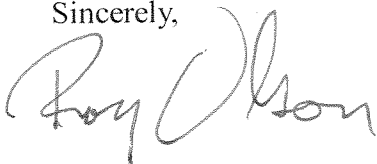
Toxicity was defined as a reduction of the NOEC below 100% and was considered significant if the effect on the sample exposure was greater than 25%. Chronic toxicity is further expressed as toxic units (TUC), where $TUC = 100/NOEC$. The No Observable Effect Concentration (NOEC) is expressed as the maximum percent of receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test. The NOEC is defined, in (USEPA, 2002) as the lowest concentration of toxicant to which organisms are exposed in a life-cycle or partial life-cycle (short-term) test, which causes adverse effects on the test organisms (i.e., where the values for the observed responses are statistically significantly different from the controls).

This definition of the listing criteria is not sufficiently straightforward and clear given that the data provided is in the form of TUCs, and the numeric TUC value to which the data were compared was not provided. A more clear presentation of the above criteria would be that significant toxicity is considered a 75% effect or greater on the test organisms as a percentage of the control.

Additionally, the toxicity listing is based on toxicity tests to multiple test species. The purpose of testing toxicity to multiple species of test organisms is that these different organisms are indicators of different types of toxicity problems. Therefore, it would be more appropriate and useful to list toxicity to each individual species independently, rather than one general toxicity listing that does not differentiate the different toxicity tests. Additionally, if there is significant toxicity to a test species by a survival endpoint, then toxicity by a reproduction or growth endpoint should not additionally be counted. Toxicity measured by a survival endpoint is greater than toxicity measured by a reproduction or growth endpoint, and is therefore already accounted for and need not be tested separately.

Thank you for your consideration of these comments. If you have any questions, please feel free to contact me at 805-652-4593.

Sincerely,



Ray Olson
Environmental Services Manager
City of San Buenaventura

cc: Vicki Musgrove, City of Ventura Assistant PW Director