Supporting Document 8

Errata Sheet II
Dated May 9, 2008
to
Tentative Resolution No. R9-2008-0028 and Attachment A, Draft Basin Plan Amendment (Dated February 29, 2008)

This Errata Sheet II, dated May 9, 2008, includes changes to the Tentative Resolution No. R9-2008-0028 and Attachment A, the Draft Basin Plan Amendment (dated February 29, 2008). In addition it contains changes to the Technical Report (dated February 29, 2008) which is approved as part of the adoption of the Tentative Resolution and Draft Basin Plan Amendment. Further, Errata Sheet II contains changes made in response to stakeholder comments as well as changes initiated by staff to correct or clarify existing text. The first Errata Sheet dated May 2, 2008 and provided in the original agenda packet, contained only changes to the draft Technical Report made in response to stakeholder comments.

Page **Document and Correction**

Corrections to the Tentative Resolution No. R9-2008-0028

pg 2 (Number 6 in the Tentative Resolution No. R9-2008-0028) Deleted and added text as follows: "A reference system is a ~~water body~~ watershed and the beach to which the watershed discharges that is minimally impacted by anthropogenic activities that can affect indicator bacteria densities in the water body. Implementation of indicator bacteria water quality objectives using the 'natural sources exclusion approach' requires that all anthropogenic sources of indicator bacteria to a water body must be controlled, demonstrate that all anthropogenic sources of indicator bacteria to a water body are controlled, and that the remaining indicator bacteria densities do not indicate an elevated health risk beyond that allowable by applicable bacteriological standards."

pg 2 (In (3) of number 7 in the Tentative Resolution No. R9-2008-0028) Added text as follows: "(3) will not result in water quality less than that prescribed in applicable policies."

pg 3 (Number 10 in the Tentative Resolution No. R9-2008-0028) Deleted and added text as follows: "~~Maintenance of~~ Indicator bacteria loads at levels that occur naturally in the environment does not create a significant impact to the environment. The Technical Report and environmental analysis provide the necessary

information pursuant to state law to conclude that this Basin Plan amendment will not result in a significant adverse effect on the environment. …This will ~~provide for the~~ result in the reduction of potentially significant impacts associated with construction and implementation of structural BMPs ~~to be reduced~~."

pg 3 (Number 11 in the Tentative Resolution No. R9-2008-0028) Deleted adverse.

pg 3 (Number 13 in the Tentative Resolution No. R9-2008-0028) Added and Deleted text as follows: "Interested persons and the public have had reasonable opportunity to participate in review of the Basin Plan amendment. Efforts to solicit public review and comment included a public workshop and CEQA scoping meeting on March 13, 2006, numerous (face to face and teleconference) meetings with the Stakeholder Advisory Group, a ~~4~~75-day public review and comment period, and a public hearing on May 14, 2008. Notices for all public meetings were sent to interested persons including cities and counties with jurisdiction in watersheds draining to the bacteria impaired beaches and creeks. All of the written comments submitted to the San Diego Water Board during the review and comment periods have been considered ~~in Appendix 4 to the Technical Report~~ Responses to Comments (supporting document 4) and Responses to Comments II dated May 9, 2008 (supporting document 7)."

Corrections to the Draft Basin Plan Amendment Attachment A to the Tentative Resolution No. R9-2008-0028

pg 6 (Section 1 in the Draft Basin Plan Amendment, Attachment A to the Tentative Resolution No. R9-2008-0028) Format change to move title down a line and capitalize the word "Implementation" as follows: …"The terms and conditions of the Ocean Plan and Thermal Plan apply to the ocean waters within this Region.

Total Maximum Daily Load (TMDL Implementation Provisions:

For the purposes of a TMDL, the water quality objectives for total coliform, fecal coliform, and/or enterococcus bacteria in ocean waters designated for contact recreation may be implemented using a reference system and antidegradation approach or natural sources exclusion approach.

See Chapter 4 (Implementation) for further discussion of this implementation provision."

pg 7 (Last sentence of page 7 in the Draft Basin Plan Amendment, Attachment A to Tentative Resolution No. R9-2008-0028) Added text as follows: In addition, "The fecal coliform concentration shall not exceed 400 organisms per 100 ml for more than 10 percent of the total samples during any 30-day period."

pg 10 (Third paragraph in section 2 in the Draft Basin Plan Amendment, Attachment A to Tentative Resolution No. R9-2008-0028) Deleted text as follows: "~~These approaches recognize that t~~There are natural sources of bacteria, which may cause or contribute to exceedances of water quality objectives for indicator bacteria. ~~They also acknowledge that i~~It is not the intent of the Regional Board to require treatment or diversion of natural water bodies or to require treatment of natural sources of bacteria."

pg 11 (Draft Basin Plan Amendment, Attachment A to Tentative Resolution No. R9-2008-0028) Deleted and added text as follows: "The reference system and antidegradation approach also requires that no degradation of existing bacteriological water quality in the targeted water body occurs when the existing bacteriological water quality is better than that of a ~~reference system~~ water body in a reference system. A reference system is a watershed and the beach to which the watershed discharges ~~water body~~ that is minimally impacted by anthropogenic activities that can affect bacterial densities in the water body. Under the reference system and antidegradation approach, a certain frequency of exceedances of the indicator bacteria water quality objectives is ~~permitted~~ allowed. The ~~permitted~~ allowed frequency of exceedances are either the observed frequency of exceedances in the selected reference system or the targeted water body, whichever is less.

Under the natural sources exclusion approach, all anthropogenic sources of indicator bacteria to the target water body must be controlled such that they do not cause or contribute to exceedances of the indicator bacteria water quality objectives. Dischargers must also demonstrate that all anthropogenic sources of indicator bacteria to the target water body are controlled and that residual indicator bacteria densities do not indicate an elevated health risk beyond that allowable by indicator bacteria water quality objectives. After all anthropogenic sources of indicator bacteria have been controlled such that they do not cause exceedances of the indicator bacteria water quality objectives, and natural sources have been identified and quantified, exceedances of the indicator bacteria

water quality objectives may be ~~permitted~~ allowed based on the residual exceedances in the target water body. The residual exceedances shall define the background level of exceedance due to natural sources.

The appropriateness of these approaches and the specific exceedances or exceedance frequencies to be ~~permitted~~ allowed under each will be evaluated within the context of TMDL development or recalculation for a specific water body, at which time the Regional Board may select one of these approaches, if appropriate.

pg 11 (Draft Basin Plan Amendment, Attachment A to Tentative Resolution No. R9-2008-0028) Deleted footnote as follows:
~~[3] Within the contexts of the reference system and antidegradation approach and natural sources exclusion approach, anthropogenic indicator bacteria sources are defined as controllable sources of indicator bacteria that have been identified as being human, domesticated animal, or resulting from human activities. Indicator bacteria sources that are human, domesticated animal, or resulting from human activities are considered uncontrollable only after all appropriate best management practices for their control have been implemented. Indicator bacteria from uncontrollable or non-anthropogenic sources that are captured by and/or transported via a storm drain system or directly discharged into receiving waters are not considered to be anthropogenic.~~

Corrections to the Technical Report

pgs 1 (Section 1 of the Technical Report) Deleted footnote as follows:
~~[2] Within the contexts of the RSAA and NSEA, anthropogenic indicator bacteria sources are defined as controllable sources of indicator bacteria that have been identified as being human, domesticated animal, or resulting from human activities. Indicator bacteria sources that are human, domesticated animal, or resulting from human activities are considered uncontrollable only after all appropriate best management practices for their control have been implemented. Indicator bacteria from uncontrollable or non-anthropogenic sources that are captured by and/or transported via a storm drain system or directly discharged into receiving waters are not considered to be anthropogenic.~~

pg 5 (Section 2 of the Technical Report) Deleted footnote as follows:
~~[5] Within the contexts of the RSAA and NSEA, anthropogenic indicator bacteria sources are defined as controllable sources of indicator bacteria that have been identified as being human,~~

~~domesticated animal, or resulting from human activities. Indicator bacteria sources that are human, domesticated animal, or resulting from human activities are considered uncontrollable only after all appropriate best management practices for their control have been implemented. Indicator bacteria from uncontrollable or non-anthropogenic sources that are captured by and/or transported via a storm drain system or directly discharged into receiving waters are not considered to be anthropogenic.~~

Pg 7 (Section 3 in the Technical Report) Table 1 was replaced with:

Table 1. Wet weather monitoring sites sampled during the period October 2004 - February 2005 showing the number (#), and percent (%) of sites sampled which exceeded the REC-1 single sample maximum indicator bacteria water quality objectives.

Wet Weather Monitoring Site	# Samples	Total Coliform (REC-1)		E. coli* (REC-1)		Enterococci (REC-1)		Total Coliform, E. coli, and/or Enterococci	
		#	%	#	%	#	%	#	%
Deer Creek Beach at Deer Creek	16	0	0	0	0	0	0	0	0
Leo Carrillo State Beach at Arroyo Sequit Creek	16	0	0	1	6	2	13	3	19
Dan Blocker Beach at Solstice Creek	16	1	6	2	13	2	13	3	19
San Onofre State Beach at San Onofre Creek	16	5	31	8	50	5	31	11	69
Total	**64**	**6**	**9**	**11**	**23**	**9**	**19**	**17**	**27**

*E. coli data were compared to fecal coliform water quality objectives, since the Basin Plan does not include E. coli water quality objectives for saltwater. Since E. coli is a subset of fecal coliform indicator bacteria, exceedances of water quality objectives were identified conservatively. Comparison of E. coli data to fecal coliform water quality objectives at a 1:1 ratio is a data analysis approach practiced by the Southern California Coastal Water Research Project (Schiff et al., 2005).

pg 11 (Section 4.2 of the Technical Report) Deleted footnote as follows:

~~[9] As defined in Section 2, anthropogenic sources of indicator bacteria are controllable sources of indicator bacteria that have been identified as being human, domesticated animal, or resulting from human activities. Uncontrollable sources of indicator bacteria are not considered anthropogenic sources for the purposes of the RSAA or NSEA. Indicator bacteria sources that are human, domesticated animal, or resulting from human activities are considered uncontrollable only after all appropriate best management practices for their control have been implemented.~~

pg 11 (Section 4.2 of the Technical Report) Added text as follows:

Under the NSEA, all anthropogenic sources (defined as human, domesticated animal, or resulting from human activity) of indicator bacteria to the water bodies subject to the indicator bacteria TMDL must controlled. Therefore, before a TMDL can be calculated using the NSEA, dischargers must demonstrate that all appropriate best management practices have been implemented to control all anthropogenic sources of indicator bacteria to the target water body. Dischargers must also demonstrate that remaining indicator bacteria densities do not pose an elevated health risk beyond that allowable under applicable bacteriological standards.

pg14 (To the end of the third sentence in section 5.1.1 of the Technical Report) Added text as follows: …"biology, climate, and land use in the developed portion of a reference system."

pg 18 (Section 5.3.1 of the Technical Report) Deleted footnote as follows: ~~[12] As defined in Section 2, anthropogenic sources of indicator bacteria are controllable sources of indicator bacteria that have been identified as being human, domesticated animal, or resulting from human activities. Uncontrollable sources of indicator bacteria are not considered anthropogenic sources for the purposes of the RSAA or NSEA. Indicator bacteria sources that are human, domesticated animal, or resulting from human activities are considered uncontrollable only after all appropriate best management practices for their control have been implemented.~~

pgs 18, 19 (Section 5.3.1 of the Technical Report) Deleted and added text as follows: ~~MS4 and nonpoint source dischargers must be able to demonstrate through a weight of evidence approach that all anthropogenic sources of indicator bacteria have been and are being controlled so that no indicator bacteria from anthropogenic sources are discharged into the target water body.~~ Before a TMDL can be calculated using the NSEA, dischargers must demonstrate that all appropriate best management practices (BMPs) have been implemented to control all anthropogenic sources of indicator bacteria to the target water body. Completely eliminating the discharge of all anthropogenic sources of indicator bacteria (defined as human, domesticated animal, or resulting from human activity) to receiving waters is likely not feasible and is not required under the NSEA. For example, storm water runoff from landscaped areas can have high indicator bacteria densities and would be considered anthropogenic. However, landscape vegetation is not necessarily a significant source of human pathogens. Although BMPs must be implemented to manage fertilizer applications, remove pet waste, and reduce storm water and dry weather runoff from landscaped areas, complete elimination of this runoff is

probably infeasible. Another example is bacteria loading from resuspension of sediment by swimmers. Although this source would be considered anthropogenic, the only way to completely eliminate resuspension of sediment is to ban swimming which would be inappropriate since this Basin Plan amendment is intended to protect the REC-1 beneficial use. Furthermore some human sources of bacteria, such as bacterial shedding from swimmers, are impractical, if not impossible to control through BMPs. To account for uncontrollable anthropogenic sources before NSEA can be used, dischargers must also demonstrate that the remaining sources, as a whole, do not pose an elevated health risk beyond that allowable under applicable bacteriological standards.

This Technical Report does not attempt to list all of the activities that will be necessary to ~~achieve this step~~ control all anthropogenic sources of indicator bacteria.

pg 19 (End of Section 5.3.1 of the Technical Report after the list of bullets) Added text as follows: In summary, the requirement to "control all sources of anthropogenic indicator bacteria" means dischargers must demonstrate they have implemented all appropriate best management practices to control anthropogenic sources such that they do not cause or contribute to exceedances of applicable water quality objectives. The requirement to "control all sources of anthropogenic indicator bacteria" does not mean the complete "elimination" of all anthropogenic sources of bacteria as this is both impractical as well as impossible. Some anthropogenic sources of bacteria, such as shedding during swimming are infeasible, impractical, or inappropriate to control.

pg 19 (End of section 5.3.1) Added text as follows: To account for uncontrollable anthropogenic sources before NSEA can be used, dischargers must also demonstrate that the remaining sources, as a whole, do not pose an elevated health risk beyond that allowable under applicable bacteriological standards.