

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

**Response to Comments
For Item No. 5A**

**Public Hearing
On
Marin Municipal Water District
Desalination Pilot Project
NPDES Permit**

A. Save the Bay Comments (February 11, 2005)

Optional Studies Biological Resources Survey, Whole Effluent Toxicity Screening, and Salinity Study.

Comment. The Permit should require the optional studies-- Biological Resources Survey, Whole Effluent Toxicity Screening, and the Salinity Study--to be conducted during the pilot project. The purpose of the pilot project should be to begin to assess how a potential full scale desalination facility would operate, and what impacts it may have on the site and surrounding environment. The information that would be collected through these studies is essential to gaining a complete understanding of the existing conditions in the Bay at the site of the proposed desalination facility. Timing these studies concurrently with the pilot project will also enable the Water District to determine whether the operation of the pilot itself has produced any changed conditions or adverse impacts at the site.

Response. This T. O. requires monitoring specific to the Pilot Plant and also monitoring to assess the potential impacts from a full-scale desalination plant. Though called optional, the biological resources survey, whole effluent toxicity screening, and salinity study, are mandatory studies if the District submits an NPDES permit application for a full-scale desalination plant. Water Board staff agrees that it would be best for the District to start these studies as soon as possible, however the implementation period should not be specified in this T.O. Water Board staff is concerned that the short-term duration of the Pilot Plant may not lend adequate time to yield effective results from well-planned studies.

The following table outlines (1) the justification to leave these study requirements as “optional” (i.e. with open-ended time frames), (2) the Pilot Plant’s effluent monitoring requirements that are applicable to these studies, and (3) other monitoring requirements that can be used to assess future permit requirements for a full-scale desalination plant.

B. Marin Municipal Water District’s Comments (February 22, 2005)

FINDINGS

Discharger and Permit Application, page 1, Finding 1.

Comment 1. *Replace “pretreatment process overflows” with “overflows (consisting of bay water and pretreated bay water)” and add the following description:*

“These flows include bay water removed but not used in the pretreatment and desalination process, and pretreated bay water not needed for the desalination process.”

Response: The Tentative Order has been amended in response to this comment. The Tentative Order now specifies “overflows¹ (consisting of bay water and pretreated bay water)”, and the above description has been added as footnote “1”.

Purpose, page 1, Finding 2, fourth sentence.

Comment 2. *Replace “pretreatment overflows” with “overflows (consisting of bay water and pretreated bay water)”.*

Response: The Tentative Order has been amended in response to this comment. The Tentative Order now states “overflows (consisting of bay water and pretreated bay water)”.

Requirements for Monitoring for Pollutants in Effluent and Receiving Water to Implement new Statewide Regulations and Policy, page 4:

Finding 19.

Comment 3. *The District requests that the entire item be deleted because of duplication in Item 20.*

Response: The Tentative Order has been amended in response to this comment. Finding 19 is removed from the Tentative Order, and Findings 20 through 26 are renumbered to Findings 19 through 25.

Finding 20.

Comment 4. *The District does not believe that the short-duration of the pilot plant warrants participation in the Regional Monitoring Program for Trace Substances (RMP) as required in the Board’s August 6, 2001 letter.*

Response. The Tentative Order has been amended in response to this comment. The sentence segment “and receiving water” in the first sentence, and the entire last sentence are deleted in Finding 19 of the Tentative Order. Board staff concurs that this requirement is not mandatory for the short-term pilot plant; however, participation in the RMP will be required if a permanent desalination plant is permitted.

Finding 21.

Comment 5. *The District believes that monitoring the Pilot Plant’s brine will be a better effluent discharge characterization for the purposes of Board staff conducting a Reasonable Potential Analysis for a full-scale desalination facility.*

Response. The Tentative Order has been amended in response to this comment. The sentence segment “effluent and ambient receiving water” is replaced with “brine” in Finding 20 of the Tentative Order. Board staff recognizes that this discharge (recombined bay water) is not representative of the discharge from a permanent desalination plant. A permanent desalination plant will be discharging only brine; therefore, brine is the appropriate discharge stream to monitor for purposes of future permitting requirements.

Finding 22, 2nd and 3rd sentence.

Comment 6. *The District believes that monitoring the Pilot Plant’s brine will better evaluate the effectiveness of solids removed from the desalination process, and suggests monitoring Total Suspended Solids and Total Dissolved Solids in the brine.*

Response. The Tentative Order has been amended in response to this comment. The sentence segment “in the brine” was added after “Total Dissolved Solids” in the second sentence, and “of the brine” was added after “annually” in the third sentence of Finding 21 of the Tentative Order.

PROVISIONS

Effluent Characterization for Selected Constituents, page 7, Provision 2, 1st sentence.

Comment 7. Refer to Comment 5 and 6.

Response. The Tentative Order has been amended in response to this comment. The Tentative Order now references “*Outfall E-001*”. This changes the monitoring point to be consistent with Comments 5 and 6.

Storm Water Pollution Prevention Plan, page 7, Provision 4, last sentence.

Comment 8. *The District does not believe that all the Storm Water Pollution Prevention Plan requirements contained in the Board’s Standard Provisions and Reporting Requirements are applicable to the Pilot Plant site.*

Response. The Tentative Order has been amended in response to this comment. The last sentence of Provision 4 was deleted from the Tentative Order. Board staff recognizes that many of the SWPPP requirements contained in the Standard Provisions are not applicable to the Pilot Plant’s site; therefore, Board staff concurs that the District should develop a SWPPP that is specific to the site and that contains best management practices applicable to its operations.

Standard Provisions and Reporting Requirements, page 8, Provision 6, 1st sentence.

Comment 9. *The District does not believe that all requirements contained in the Board’s Standard Provisions and Reporting Requirements are applicable to the Pilot Plant site.*

Response. The Tentative Order has been amended in response to this comment. The comment “(Items B.2, C, and D are not applicable)” is inserted in the first sentence following “applicable items”. Board staff concurs that the Standard Storm Water Provisions Source Identification, Sludge Monitoring and Reporting, and Treatment Reliability sections in the Board’s Standard Provisions and Reporting Requirements document are not applicable to the Pilot Plant’s site nor operations.

NPDES Permit Effective Date, page 9, Provision 11, 1st sentence.

Comment 10. *The District requested the NPDES Permit Effective Date of March 16, 2005.*

Response. The Tentative Order has been amended in response to this comment. Board staff believes that the Board and the Executive Officer should have the opportunity to hear public comments, if any, during the meeting on March 16th before the Final Order becomes effective. Therefore the effective date of “April 1, 2005” was replaced with “March 17, 2005”.

ATTACHMENTS

Attachment F, page 9, 3rd document.

Comment 15. *The District does not believe that Board Resolution No 74-10 is applicable to the Pilot Plant’s operations.*

Response. The Tentative Order has been amended in response to this comment. The document, *Board Resolution No. 74-10*, was deleted from Attachment F of the Tentative Order. Board Resolution No 74-10 requires dischargers to develop contingency plans which is not applicable to the Pilot Plant’s temporary operations because under emergency conditions its operations would cease.

SELF-MONITORING PROGRAM

Self-Monitoring Program (SMP), Part B, Effective Date.

Comment 14. Refer to Comment 10.

Response. The SMP’s effective date is now “*March 17, 2005*” to be consistent with Comment 10.

SMP, Item II. Schedule of Sampling, Analyses And Observations, page 3, last sentence of the paragraph, and column E-001 of Table 1.

Comment 12. Refer to Comments 5 and 6.

Response. The SMP has been amended in response to this comment. The phrase “of the brine” was inserted after “pollutant monitoring” in the last sentence of the paragraph. Table 1, of the SMP, was modified to include monitoring the brine twice-monthly of Total Suspended Solids and Total Dissolved Solids.

SMP, Footnotes for Table 1, page 4, footnote 5.

Comment 11. *Replace “Main” with “Marin”.*

Response. The SMP had already been corrected.

SMP, Item IV. Report Requirements, Section B. Modifications to Self-Monitoring Program, Part A, page 5.

Comment 13. *The District does not believe that all requirements contained in the SMP, Part A, Adopted August 1993, are applicable to the Pilot Plant site.*

Response. The SMP has been amended in response to this comment. Board staff concurs that the sections specified in the following paragraph are not applicable to the Pilot Plant’s site nor operations, which has been added to the end of Section B of the SMP

“5. The Discharger is not subject to the requirements of Sections C.3 Storm Water, C.4 Receiving Waters, C.5 Bottom Sediment Samples and Sampling and Reporting Guidelines, D.2 Wastewater Effluent, D.3 Beach and Shoreline, D.4 Land Retention and Disposal Area, and D.5 Periphery of Waste Treatment and/or Disposal Facilities, of Part A of the SMP, which are not applicable to the Discharger’s operation.”