

REGIONAL WATER QUALITY CONTROL BOARD - SAN FRANCISCO BAY
BOARD MEETING MINUTES

September 12, 2007

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Item 1 – Roll Call and Introductions

The meeting was called to order on September 12, 2007 at 9:07 a.m. in the State Office Building Auditorium, First Floor, 1515 Clay Street, Oakland.

Board members present: John Muller, Chair; Margaret Bruce; Shalom Eliahu; William Peacock; Clifford Waldeck; Terry Young.

Board member absent: Mary Warren.

John Wolfenden introduced Laurent Meillier, new staff.

Item 2 – Public Forum

The minutes of this item will be prepared in a supplemental.

Item 3 – Minutes of the August 8, 2007 Board Meeting

Mr. Wolfe recommended the minutes be corrected. He said the last line of the fourth paragraph on page 9 should read: "...new task c read:." He said the second line of the second indented paragraph on page 10 should read: "effluent limitations specified in effluent limitations..."

Mr. Wolfe recommended adoption of the minutes as corrected.

Motion: It was moved by Mr. Peacock, seconded by Mr. Eliahu, and it was unanimously voted to adopt the Minutes of the August 8, 2007 Board Meeting as corrected and recommended by the Executive Officer.

Item 4 - Chairman's, Board Members', and Executive Officer's Reports

The minutes of this item will be prepared in a supplemental.

Item 5 – 2007 Dr. Teng-chung Wu Pollution Prevention Award – Presentation of Award in Recognition of Exceptional Accomplishments in Pollution Prevention in the San Francisco Bay Area

Mr. Muller said Dr. Wu's family was attending the Award presentation and introduced Mrs. Wendy Wu, her daughter, and granddaughter.

Heather Ottaway announced the Bay Area Pollution Prevention Group and the East Bay Municipal Utility District were the recipients of the 2007 Dr. Teng-chung Wu Pollution Prevention Award. She said San Mateo County received an Honorable Mention.

Ms. Ottaway said the Award honors the late Dr. Wu's dedication to improving water quality through pollution prevention. She said pollution prevention involves reducing pollutants at their source rather than reducing pollutant levels through wastewater treatment processes. She briefly described the outstanding work of the Bay Area Pollution Prevention Group, EBMUD, and San Mateo County.

Karin North, Bay Area Pollution Prevention Group, thanked the Board for working with the Pollution Prevention Group to develop programs. She said the Pollution Prevention Group held a Workshop in December 2006 at which three wastewater agencies that have implemented dental amalgam reduction programs discussed how other agencies could develop programs. She said nine agencies are using information from the workshop to start dental amalgam reduction programs.

Doug Linney, Vice-President, Board of Directors, East Bay Municipal Utilities District, said EBMUD was honored to be recognized for developing pollution prevention partnerships with environmental groups. He described EBMUD's work with the following groups: Save the Bay to collect pharmaceuticals and mercury thermometers; Baykeeper to reduce the amount of household cooking grease that enters the sewer collection system; and the Environmental Working Group to develop technical information regarding consumer products that are suspected of disrupting endocrine functions.

Bill Chaing, on behalf of the San Mateo County Board of Supervisors, thanked the Board for recognition of the County's Pharmaceutical Disposal Program. He said the Program has processed 2,800 pound of products in a little less than a year.

Item 6 – Consideration of Uncontested Items Calendar

Mr. Wolfe recommended adoption of the uncontested calendar.

Motion: It was moved, seconded by Mrs. Bruce, and it was unanimously voted to adopt the uncontested calendar as recommended by the Executive Officer.

Item 7 – Mr. John Travis, 162 San Lazaro Avenue, Sunnyvale, Santa Clara County – Hearing to Consider Imposition of Administrative Civil Liability or Referral to the Attorney General for Late Technical Report

Mr. Wolfe said Mr. John Travis signed a waiver of the right to a hearing on the proposed Administrative Civil Liability and no Board action was necessary. Mr. Wolfe said Mr. Travis agreed to pay an ACL in the amount of \$20,000.

Item 8 – Mr. Donald Medeiros, 154 San Lazaro Avenue, Sunnyvale, Santa Clara County – Hearing to Consider Imposition of Administrative Civil Liability or Referral to the Attorney General for Late Technical Report

Dyan Whyte, Stephen Hill, John Wolfenden, Nathan King, and Bruce Wolfe served as prosecuting staff. Dorothy Dickey and Vic Pal served as Board advisors.

Nathan King described the Tentative Order.

Mr. King answered questions from Board members.

Sophie Froelich, Nossaman, Guthner, Knox & Elliot, LLP, on behalf of Mr. Donald Medeiros, testified. She asked Mr. King questions and Mr. King replied. She requested a statement that would be read by Mr. Medeiros be submitted into the record.

Mr. Donald Medeiros read a statement.

Mr. Medeiros replied to questions asked by Mrs. Bruce.

Mr. Medeiros replied to comments made by Mr. Muller.

Ms. Froelich testified briefly.

Peter McIntyre, Senior Project Manager, AEI Consultants, on behalf of Mr. Donald Medeiros, testified.

There was discussion among Board members, Board advisor, and prosecutorial staff.

Ms. Froelich testified further and replied to questions from Mr. Waldeck.

There was further discussion.

Motion: It was moved by Dr. Young, seconded by Mr. Peacock, and it was voted to adopt the Tentative Order.

Roll Call:

Aye: Mrs. Bruce; Mr. Eliahu; Mr. Peacock; Mr. Waldeck; Dr. Young; Mr. Muller

No: None

Motion passed 6 – 0.

Item 9 – City and County of San Francisco, San Francisco International Airport, Water Quality Control Plan, San Mateo County – Hearing to Consider Mandatory Minimum Penalty for Discharge in Violation of Effluent Limitations

Mr. Wolfe said the permittee signed a waiver of the right to a hearing on the proposed MMP and no Board action was necessary. Mr. Wolfe said the permittee agreed to pay a Mandatory Minimum Penalty in the amount of \$12,000.

Mark Costanzo, Utility Manager, San Francisco International Airport, briefly addressed the Board.

[The Board took a lunch break at 11:42 a.m. and resumed the meeting at 12:32 p.m.]

Item 10 – Proposed Amendment to the Water Quality Control Plan (Basin Plan) to Establish a Total Maximum Daily Load (TMDL) and Implementation Plan for Polychlorinated Biphenyls (PCBs) in San Francisco Bay – Hearing to Receive Testimony on Proposed Basin Plan Amendment (No Action Will Be Taken)

Mr. Muller said he met on September 11, 2007 with representatives from General Electric Company and they briefly discussed Bay issues.

Dr. Young said she talked with counsel and was advised she did not have a conflict of interest in considering the TMDL.

Mr. Wolfe said this hearing is being held for the purpose of receiving testimony on the TMDL.

Dr. Fred Hetzel thanked the San Francisco Estuary Institute, the Regional Monitoring Program, and the Clean Estuary Partnership for their contributions to the TMDL.

Dr. Hetzel said polychlorinated biphenyls were used from the 1940s to the 1970s in electrical equipment and in paints, adhesives, and caulks. He said PCBs were banned in the 1970s. He said the compounds remain in the environment, particularly in older industrial areas.

Dr. Hetzel said sediments are the main reservoir of PCBs in the Bay. He said PCBs that enter the Bay from land sources may mix and settle in sediments. He said PCBs are taken up by aquatic organisms living in the water or sediments. He said PCBs move up the food chain as fish consume organisms.

Dr. Hetzel said PCB concentrations in Bay fish present a health concern for humans and wildlife. He said people who eat fish have increased risk of cancer.

Dr. Hetzel said the TMDL proposes a PCB fish tissue target of 10 parts per billion in order to protect humans and wildlife. He said a food web model was used to translate the fish tissue target to a PCB sediment level. He said a mass budget was used to calculate the PCB load that would achieve the fish tissue target.

Dr. Hetzel identified categories of PCB sources in the Bay: internal sources and external sources. He said internal sources are: in-Bay disposal of dredged material; in-Bay contaminated hot spots; and erosion of buried sediments. He said the TMDL does not include allocations for internal sources.

Dr. Hetzel described current PCB loads and proposed allocations for external sources (kilograms per year):

<u>External Sources</u>	<u>Current Loads</u>	<u>Load Allocations</u>
Atmospheric Deposition	net loss	0
Central Valley Watershed	42	5
Wastewater	2.3	2
Urban Stormwater Runoff	40	2
Non-Urban Stormwater Runoff	0.1	0.1
Urban Runoff Treatment	none	0.9
		10

Dr. Hetzel said staff anticipates PCBs in the Central Valley Watershed load will be reduced through natural attenuation. He said PCB concentrations in sediment and water from the Central Valley are lower than concentrations in Bay sediment and water.

Dr. Hetzel said the municipal wastewater allocation of 2 kilograms per year will be apportioned among individual wastewater permittees. He said 0.9 kilograms a year is proposed to be allocated for treatment of urban stormwater by wastewater treatment plants. He said staff views the allocation as an incentive for permittees to explore the feasibility of treating stormwater.

Dr. Hetzel said the urban stormwater runoff allocation of 2 kilograms per year will be apportioned among individual county-wide permittees. He said implementation actions to reduce urban stormwater loads will be keyed to five year NPDES permit terms. He said actions will be focused in historically industrial areas during the first permit term.

Dr. Hetzel said the TMDL utilizes an adaptive implementation approach and actions that have proven benefit will be implemented first.

Dr. Tom Mumley reviewed comments staff received on the TMDL. He said Roger James, a concerned citizen, commented on urban runoff implementation measures.

Dr. Mumley said U.S. EPA requested staff explain in greater detail how the Central Valley load reduction will be achieved and how allocations for wastewater permittees will be implemented.

Dr. Mumley said the Bay Area Clean Water Agencies submitted comments supporting the adaptive implementation process. He said BACWA requested the aggregate PCB wastewater allocation not be apportioned among individual permittees. He said BACWA commented that permittees have limited ability to reduce PCB loads.

Dr. Mumley said Bay Area Stormwater Management Agencies Association commented on limitations of the one-box model of the Bay and on uncertainties in calculating the PCB urban stormwater load. He said BASMAA questioned the technical feasibility of achieving the urban stormwater allocation. He said BASMAA expressed concern about placing responsibility for PCB site cleanups on municipalities.

Dr. Mumley said Baykeeper and Clean Water Action expressed concern that the fish tissue target will not protect subsistence fishers. He said they requested the TMDL include: (1) a sediment target; (2) more detail about implementation of urban stormwater load reductions; (3) a timeframe for cleanup of in-Bay contaminated sites; (4) more detail about how the Central Valley load allocation will be achieved; (5) greater emphasis on wastewater permittees.

Dr. Mumley said the California Chamber of Commerce and General Electric Company commented that the TMDL does not account for natural recovery of the Bay from PCBs. He said they commented upon the infeasibility of achieving the urban stormwater allocation. He said they expressed concern with staff's analysis of the environmental and economic impacts of implementation actions. He said they expressed concern that numeric values in the TMDL may become defacto sediment cleanup standards.

Dr. Mumley said staff will reply to the comments in a Response to Comments document and will revise the TMDL if appropriate. He thanked Naomi Feger and Jody Bailey for their work on the TMDL.

In reply to questions from Clifford Waldeck, Dr. Mumley said staff revised the proposed fish tissue target based upon comments from U.S. EPA. He said the California Chamber of Commerce and General Electric Company submitted extensive written material that included comments on the TMDL, reports from experts, and other documents.

Mr. Peacock asked how long it would take to achieve the fish tissue target through natural attenuation processes.

Dr. Mumley gave a rough estimate and said the Bay possibly may not recover as long as PCB loads remain at current levels.

In reply to a question from Margaret Bruce, Dr. Mumley discussed the Central Valley Watershed load.

Mrs. Bruce suggested the TMDL for San Francisco Bay describe the uncertainty that exists in the data that were used to calculate loads and allocations. She said commentors have questioned being required to achieve a specific allocation when there is uncertainty in the data.

Dr. Mumley said staff's Response to Comments document will address whether the uncertainty affects proposed regulatory requirements and implementation actions. He said the Response to Comments document also would address whether further study is required to understand the uncertainty. He said staff relied on the analysis of PCB sources and loads in the Conceptual Model Report prepared by the San Francisco Estuary Institute.

Mrs. Bruce suggested the TMDL describe data collection processes and describe in greater detail how calculations were made.

Dr. Mumley said staff will try to document the processes and calculations.

Mrs. Bruce asked why population was used as a basis to apportion the aggregate urban stormwater runoff allocation among county-wide permittees.

Dr. Mumley said staff used population in an effort to keep the initial apportionment process simple. He said the apportionment may change as information is gained through adaptive implementation.

Mr. Peacock asked Dr. Mumley for information the Board must consider about economic impacts of the TMDL.

Dr. Mumley said the California Environmental Quality Act requires that an evaluation of reasonable foreseeable TMDL compliance methods be prepared and that the evaluation include economic considerations. He said Water Code Section 13241 requires economic considerations be taken into account when water quality objectives are established. He said the statutes do not require preparation of a cost-benefit analysis.

Dr. Young asked whether numeric values, like the fish tissue target and load allocations, can be changed after the TMDL is adopted.

Dr. Mumley replied affirmatively and said all numeric values may be changed.

Ms. Dickey said economic considerations of the TMDL must be analyzed. She differed with Dr. Mumley's interpretation of some legal provisions.

Ellen Johnck, Executive Director, Bay Planning Coalition, expressed concern about the standard in the TMDL for in-Bay disposal of PCB contaminated sediment and suggested an alternative standard. She expressed concern about the sediment management strategy that would be required to achieve the proposed fish tissue target. She expressed concern that the TMDL does not take into account that bioavailability of PCBs varies in different parts of the Bay due to hydraulic, biological, chemical, and ecological factors.

Ms. Johnck suggested the TMDL reflect the fact that only a small fraction of PCBs sequestered in sediments is released. She said recent studies found PCBs move through the water column and not through sediment. She expressed concern that the dredging community may not be able to achieve sediment removal targets in the Long Term Management Strategy due to circumstances beyond its control.

Ivan Karnezis, Senior Engineer, Division of Environmental Analysis, Caltrans, introduced Jag Grewal who will serve as liaison between the Water Board and Caltrans' Stormwater Unit. He said Caltrans submitted written comments on the TMDL. He thanked Mrs. Bruce and Mr. Peacock for their questions and said he looked forward to reading staff's Response to Comments document.

Andria Ventura, Program Manager, Clean Water Action, and representing Environmental Justice Coalition, requested the TMDL include more detail on implementation of urban stormwater load reductions. She said methods permittees may use to demonstrate progress in reducing PCB loads may not yield necessary information. She requested stormwater permittees be required to inspect former industrial sites that may contain PCBs and the Water Board develop cleanup standards for the sites. She expressed concern the fish tissue target may not protect subsistence fishers and requested a more conservative target.

Paul Singarella, Attorney, Latham & Watkins LLP, on behalf of California Chamber of Commerce and General Electric Company, spoke against using remedial dredging to achieve the TMDL. He requested numeric goals in the TMDL not serve as cleanup standards and remedial programs be considered separately from the TMDL. He said his clients are committed to working with the Board to ensure the TMDL is based on sound science.

Dr. John Connolly, President, Quantitative Environmental Analysis LLC, on behalf of California Chamber of Commerce and General Electric Company, said the TMDL does not take into account natural recovery of the Bay from PCBs. He said the assimilative capacity of the Bay is higher than estimated by the model staff used.

Dr. Connolly said the assessment in the TMDL of PCB loads is deficient. He said in-Bay dredging is costly and inefficient. He said there should be remediation of on-land contaminated sites that are sources of in-Bay contamination.

Sejal Choksi, San Francisco Baykeeper, requested the TMDL: (1) specify actions that will be taken if reduction of the Central Valley Watershed load is not achieved; (2) establish a timeframe and standards for cleanup of contaminated sites; (3) require wastewater permittees use a lower detection limit for analyzing effluent. She concurred with Ms. Ventura's request for a more conservative fish tissue target and for more detail about implementation of urban stormwater load reductions.

Mr. Waldeck asked Ms. Choksi whether the TMDL is necessary if PCBs levels in the Bay are declining over time.

Ms. Choksi said the assimilative capacity of the Bay for PCBs will be restored through implementation of the TMDL. She said the Bay currently is listed as impaired by PCBs.

Dr. David Sunding, Principal, Berkeley Economic Consulting, Inc., on behalf of General Electric Company and the California Chamber of Commerce, commented on positive and negative economic impacts of the TMDL. He said it is difficult to estimate compliance costs because implementation actions are not identified in detail. He said it would be reasonable to assume compliance costs may be substantial. He said staff estimated costs to achieve the urban stormwater runoff allocation may reach \$500 million annually.

Dr. Sunding said benefits that will be achieved through implementation of the TMDL are not defined explicitly. He gave an estimate of benefits. He concluded the TMDL could impose high costs in relation to benefits achieved.

In reply to a question from Clifford Waldeck, Dr. Connolly discussed what permittees may be required to do to achieve the urban stormwater load allocation.

Jon Konnan, Engineer, Bay Area Stormwater Management Agencies Association, requested a schedule to update the TMDL, with information gained through the adaptive implementation process, be included as part of the TMDL. He said a multi-box model indicated bed erosion, not external sources, controls what future PCB levels in the Bay will be. He requested the TMDL be updated in 2008 with information obtained from the multi-box model.

Mr. Konan requested a realistic urban stormwater runoff allocation and timeframe to achieve the allocation be developed through the adaptive implementation process. He requested cleanup of PCB sites occur through existing regulatory programs and not through municipal stormwater permits. He recommended there should be a connection between current PCB cleanup projects and the TMDL.

Mr. Peacock requested staff send copies of speakers' power point presentations to Board members.

Douglas Samuels, President, Clean Water Corp., said his firm has developed a water treatment system that can treat water that is considered impractical to treat with traditional systems. He said he would like to discuss with interested parties how the system could be used to remove PCBs from water.

Kaumil Parghi, Assistant Engineer, San Francisco Public Utilities Commission, said SFPUC operates a sewer system that collects and treats both wastewater and urban stormwater runoff. He asked if staff will provide guidance on stormwater controls that may be required to achieve allocations in the TMDL.

Dr. Mumley said staff does not have specific information on treatment controls to manage urban stormwater runoff. He said the adaptive implementation process will be used to evaluate the feasibility and effectiveness of controls. He said SFPUC may combine wastewater and urban stormwater allocations because it operates a combined system.

Michele Plá, Executive Director, Bay Area Clean Water Agencies, spoke in favor of the fish tissue target in the TMDL and the adaptive implementation process. She requested the TMDL include only an aggregate wastewater allocation and not include allocations for individual wastewater permittees.

Ms. Plá requested the TMDL require wastewater permittees comply with a PCB effluent limit in NPDES permits of 1.0 micrograms per liter. She said the TMDL proposes permittees comply with a PCB effluent limit of 0.5 micrograms per liter. She said the detection limit using available analytic methods is 0.5 micrograms per liter. She requested wastewater permittees be required to use only U.S. EPA approved analytical methods.

In reply to a question from Clifford Waldeck, Ms. Plá reiterated her request that allocations for individual wastewater permittees be deleted from the TMDL. She said the TMDL requires that individual permittees meet PCB effluent limits in NPDES permits and report on PCB loads released to the Bay.

Dr. Young recommended the TMDL identify those actions that will occur only if the TMDL is adopted from those actions that are ongoing or are planned under other regulatory programs. She said speakers have identified a number of implementation scenarios. She suggested staff prioritize implementation actions and implement those actions that would yield results under all scenarios.

Mrs. Bruce and Mr. Waldeck concurred with Dr. Young's suggestion.

Dr. Young suggested staff clarify which agencies would oversee cleanup of contaminated sites. She suggested the relationship between sediment cleanup standards and the TMDL sediment goal be clarified. She concurred with Mr. Konnan's suggestion that a schedule to update the TMDL be included as part of the TMDL.

Mr. Peacock suggested either Mr. Singarella, or another representative, and staff prepare a brief written legal summary of economic impacts of the TMDL that the Board must consider.

Mr. Singarella said the Board, under the Porter-Cologne Water Quality Control Act and the California Environmental Quality Act, must consider economics and must establish balanced, reasonable regulations. He said the Board is not required to consider a cost-benefit analysis. He briefly discussed Water Code Sections 13000, 13241, and 13242.

Mr. Wolfe said a hearing to consider adoption of the TMDL may be held in November.

Mr. Muller thanked everyone who participated in the hearing.

[The Board took a break at 3:10 p.m. and resumed the meeting at 3:17 p.m.]

Item 11 – Port of Richmond, Vopak North America, Inc., and United Molasses Company for Port of Richmond Terminal 4, Richmond, Contra Costa County – Adoption of Site Cleanup Requirements

Terry Seward described the Revised Tentative Order.

Staff answered questions from Board members.

Todd Maiden, Reed Smith LLP, on behalf of United Molasses Company, and Steve Tekosky, Tatro Tekosky Sadwick, LLP, on behalf of Vopak North America, Inc., requested the hearing be continued for 60 to 90 days.

Mr. Tekosky replied to a question from Mr. Waldeck.

Robert Goodman, Rogers Joseph O'Donnell, on behalf of the Port of Richmond, spoke against the request for continuance.

After discussion by staff and consultation with Board members, Mr. Muller said the hearing would be held.

Gordon Thrupp, Associate Hydrogeologist, Geosyntec Consultants, testified on behalf of Vopak North America, Inc.

Bob Reynolds, Senior Geologist, Secor International Inc., and Mr. Maiden, testified on behalf of United Molasses Company.

[At approximately 4:00 p.m., Mrs. Bruce left the meeting.]

Mr. Goodman testified on behalf of the Port of Richmond.

In reply to a question from Clifford Waldeck, staff provided background information.

Mr. Muller said he was in favor of adopting the Revised Tentative Order.

Motion: It was moved by Mr. Peacock, seconded by Mr. Eliahu, and it was voted to adopt the Revised Tentative Order.

Roll Call:

Aye: Mr. Eliahu; Mr. Peacock; Mr. Waldeck; Dr. Young, Mr. Muller

No: None

Motion passed 5 – 0.

Item 16 – Adjournment

The Board meeting was adjourned at 4:25 p.m.