

REGIONAL WATER QUALITY CONTROL BOARD - SAN FRANCISCO BAY  
BOARD MEETING MINUTES  
November 20, 2002

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Item 1 - Roll Call and Introductions

The meeting was called to order on November 20, 2002 at approximately 9:04 a.m. in the State Office Building Auditorium, First Floor, 1515 Clay Street, Oakland.

Board members present: John Muller, Chair; Clifford Waldeck, Vice-Chair; Kristen Addicks; Josephine De Luca; Shalom Eliahu; John Reininga; and Mary Warren.

Board members absent: Doreen Chiu [Note: Mrs. Chiu arrived at 9:25 a.m.]; and William Schumacher [Note: Mr. Schumacher arrived at 9:10 a.m.]

Item 2 - Public Forum

There were no public comments.

Item 3 - Minutes of the October 16, 2002 Board Meeting

Motion: It was moved by Mrs. Addicks, seconded by Mr. Reininga, and it was unanimously voted to adopt the minutes as recommended by the Executive Officer. Note: Mrs. De Luca and Mr. Waldeck recused themselves because they did not attend the October Board meeting.

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

Loretta Barsamian discussed an item in the written Executive Officer's Report. She said Western States Petroleum Association petitioned the State Board to review an amendment to the Santa Clara Valley Municipal Stormwater Permit's New and Redevelopment Provision. She said the Regional Board adopted the amendment in October 2001. She said WSPA took the position that gas stations should be exempt from the new stormwater treatment requirements. She said the State Board recently dismissed the petition, concluding WSPA failed to justify the exclusion of gas stations from stormwater treatment requirements that apply to all other land uses.

[Mr. Schumacher arrived at 9:10 a.m.]

John Muller, Clifford Waldeck, John Reininga, Bill Schumacher, and Shalom Eliahu reported attending the WQCC meeting in Sacramento. They said there was discussion

about the State budget situation. They reported Tom Mumley gave a talk on TMDL development and implementation.

Mr. Muller congratulated Josephine De Luca and Kristen Addicks on their recent reappointment by Governor Davis to the Regional Board.

[Mrs. Chiu arrived at 9:25 a.m.]

Mr. Muller appointed Mrs. De Luca and Mr. Reininga to serve on a nominating committee to recommend candidates for Chair and Vice-Chair in the year 2003.

#### Item 5- Uncontested Calendar

Ms. Barsamian said there was supplemental to Item 5C. She recommended adoption of the uncontested calendar.

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

#### Item 6 – Alameda Countywide Clean Water Program, Alameda County – Reissuance of NPDES Permit to Discharge Stormwater Runoff from Municipalities

Ms. Barsamian recommended this item be continued.

#### Item 7 – Contra Costa Clean Water Programs, Contra Costa County – Amendment of Order 99-058, NPDES Municipal Stormwater Permit No. CAS0029912

Ms. Barsamian recommended this item be continued.

#### Item 8 – San Mateo Countywide Stormwater Pollution Prevention Program, San Mateo County – Amendment of Order 99-059, NPDES Municipal Stormwater Permit No. CAS0029921

Ms. Barsamian recommended this item be continued.

#### Item 9 – Status Report on Total Maximum Daily Load for Pathogens in Tomales Bay

Dyan Whyte, Farhad Ghodrati, and Becky Tuden gave staff presentations.

Ms. Whyte gave an introduction on water quality issues in the Tomales Bay watershed. She said a central challenge in developing the TMDL for pathogens is to find ways to manage land so that agriculture is sustained, limited residential growth is allowed, tourism is provided for, and the natural resources of the Bay are protected. She noted that Tomales Bay is one of four locations in California where waters are suitable for commercial oyster production. She said human consumption of pathogens in shellfish poses a health threat.

Mr. Ghodrati said his presentation and Becky Tuden's presentation would be based on staffs' Preliminary TMDL Project Report. He defined pathogens as parasites capable of

causing disease in their hosts. He said human sources of pathogens include faulty septic tanks, boat discharges and small sewage treatment facilities. He said animal sources of pathogens include animal agriculture – dairies, horse farms, and grazing lands – as well as wildlife and residential runoff containing pet waste. Mr. Ghodrati said pathogens adversely affect the beneficial uses of Tomales Bay. He said in 1998, 171 people became ill after eating contaminated shellfish.

Becky Tuden said there is an interconnection between the lifestyle of the area and the sources of pathogens. She said stakeholders are undertaking a three-step process that involves developing: (1) source assessments of pathogens, (2) plans to identify site-specific source control actions, and (3) implementation of the actions. She said the Marin County Septic Technical Advisory Committee has completed a source assessment and has developed a plan for source control. She said ranchers also have completed a source assessment and are starting to conduct a plan to identify source control actions.

Ms. Tuden said the Preliminary TMDL Report recommends that pathogen reduction actions be implemented in phases. She said interim goals include a 30% reduction in pathogen concentration by 2005, and a 75% reduction by 2007.

Kristen Addicks asked if hikers and kayakers that camp at beaches create pathogen problems.

Ms. Tuden said recreational users like campers could be a potentially virulent source of pathogens.

Mrs. Addicks asked about mercury concentration in Tomales Bay shellfish.

Ms. Whyte said the mercury concentration in shellfish is below a level of concern. She noted mercury in larger fish like halibut and shark is a concern due to the pollutant's bioaccumulative nature.

Josephine De Luca asked about political acceptance of the Preliminary Project Report.

Ms. Tuden replied the Tomales Bay community was galvanized by the 1998 shellfish outbreak. She said there is a lot of momentum to remedy problems.

John Muller asked that Board members be notified when stakeholder meetings are scheduled to occur near their residences.

John Reininga asked about enforcement measures that could be taken against property owners that fail to fix leaking septic systems.

Ms. Tuden said the Regional Board delegated authority to regulate septic systems to the County of Marin.

In response to a question from Mrs. Warren, Ms. Barsamian noted a number of septic systems in the Tomales Bay watershed leak directly into a waterbody.

Ms. Barsamian said the State Board and the Department of Health Services have prepared draft technical standards for septic tank systems.

Item 10 – Status Report on Total Maximum Daily Load for Mercury in San Francisco Bay

Bill Johnson and Richard Looker gave staff presentations.

Mr. Johnson said mercury binds to sediment, and is a persistent bioaccumulative pollutant. He said elevated mercury levels have been found in fish in San Francisco Bay. He said elevated mercury levels also have been found in the eggs of birds that live around the perimeter of the Bay.

Mr. Johnson said the TMDL for mercury includes numeric targets for mercury in fish tissue, bird eggs, and sediment. He said the numeric targets would be used to track progress on reducing the pollutant.

Mr. Johnson estimated about 1,200 kilograms of mercury enter the Bay each year. He said mercury originating in the Central Valley is the largest source of the pollutant. He said material dredged from the Bay and re-deposited in the Bay is the second largest source. He said other sources include: urban stormwater runoff, rural stormwater runoff, direct atmospheric deposition, and wastewater.

Mr. Johnson estimated about 1,200 kilograms of mercury are lost from the Bay each year. He said mercury in Bay water that moves out through the Golden Gate is the largest loss. He said mercury in dredged material that is deposited outside the Bay is the second largest loss. He said another loss is through evaporation. He noted there is a net loss of dredged material from the Bay when the amount of material re-deposited in the Bay is considered against the amount of material deposited elsewhere.

Richard Looker said a lot of mercury is present in the Bay because of historic activities. He said the mercury associated with historic activities is in addition to the amount that enters and is lost each year. He said because of historic activities, it would take a long time for all of the mercury to work through the Bay system, even if mercury sources to the Bay somehow were stopped.

Mr. Looker said mercury concentrations in fish are dependent upon the amount of mercury that is converted to methylmercury. He said methylmercury is bioavailable. It is noted that bacteria convert mercury into methylmercury, a more toxic form of the pollutant. It is also noted mercury enters the food web when small aquatic organisms take up methylmercury.

Mr. Looker said the implementation plan for the TMDL will: (1) reduce controllable loads, (2) reduce methylmercury production, (3) require monitoring and studying of the Bay, and (4) encourage actions that address multiple pollutants.

Mr. Looker reviewed current mercury loads to the Bay for each source, and reviewed proposed load allocations. He said more dredged material probably would be deposited in the ocean or at upland locations instead of re-deposited in the Bay. He said the load allocation plan provides for a significant reduction in mercury from the Guadalupe River watershed.

Mrs. De Luca asked whether aquatic life would be harmed if dredged material were deposited in the ocean.

Mr. Looker said ocean disposal might be preferable to bay disposal because more biological activity probably occurs in bay locations.

Mrs. Addicks was concerned about “cleaning the bay but trashing the ocean.” She asked about mercury concentrations found in fish caught in the ocean and sold in public markets.

Dyan Whyte said mercury concentrations in large ocean fish have been increasing. She said atmospheric deposition is a source of mercury found in the ocean. She said increased concentrations have been attributed to increased atmospheric deposition. She said the burning of fossil fuels is thought to be a cause of mercury in the atmosphere. She said because of bioaccumulation, elevated mercury concentrations are found in large ocean fish rather than small ocean fish.

Tom Mumley said a greater rate of methylation might occur in dredged material deposited in the bay compared to material deposited in the ocean.

Ron Gervason said he represents the Board in the Long Term Management Strategy for Dredged Material Disposal process. He discussed ocean disposal and upland disposal of dredged material. He said an ocean disposal site is located about 50 miles offshore and beneath several thousand feet of water. He said dry upland locations do not have high methylation rates.

Ms. Barsamian said the science on methylation is not perfect and many studies are being conducted. She said a goal of the LTMS process is to encourage more ocean and upland disposal. She said U.S. EPA and the U.S. Army Corps of Engineers monitor the ocean disposal site. She said the rate of methylation at the ocean site is believed to be lower than methylation rates at wetlands located on the Bay perimeter.

Mrs. Addicks asked about the downside of upland disposal of dredged material.

Larry Kolb said there is not a downside if dredged material is covered with clean sediment.

Mr. Gervason said the number of upland areas available for disposal of dredged material is limited.

Mrs. De Luca asked if dredged material deposited in the ocean was a cause of increased mercury concentration found in large ocean fish.

Ms. Whyte said atmospheric deposition is believed to be the cause of increased mercury concentration in large ocean fish. She said fish that dominate the food web in the ocean consume creatures that live in the water column. She said fish that dominate the food web in the Bay consume creatures that live in sediments where methylation occurs.

Clifford Waldeck asked about the load allocation for the disposal of dredged material in the Bay.

Mr. Looker said the proposed allocation is based solely on the LTMS agreement.

Shalom Eliahu asked if mercury in dredged material deposited at upland sites leaches to groundwater.

Larry Kolb noted mercury adheres tightly to sediment. Dyan Whyte said mercury typically is found in low concentrations in groundwater, a finding that is consistent with mercury's strong affinity to sediment.

Mrs. Addicks expressed support for disposal of dredged material at upland locations.

Jim Kelly, Chair of Bay Area Clean Water Agencies, said wastewater treatment plants contribute about 1% of the mercury load to the Bay. He commended staff for their work on the Final Project Report for the TMDL for mercury.

#### Item 14 – Closed Session – Personnel

The Board took a lunch break at approximately 11:05 a.m. and went into closed session to discuss personnel issues. At the completion of the closed session, the meeting was adjourned.

#### Adjournment

The meeting was adjourned at approximately 12:45 p.m.