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July 10, 2015

Mr. Bruce Wolfe
Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: Comments on the Tentative Order for the Reissued NPDES Stormwater Municipal Regional Permit

Dear Mr. Wolfe:

The County of San Mateo (County) appreciates this opportunity to comment on the Tentative Order for the reissued NPDES stormwater municipal regional permit ("MRP 2.0") that was recently released by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) staff. The County supports the intent of the MRP to protect water quality; however, we foresee challenges in implementing and executing the Tentative Order within the proposed time frames. The County would like to emphasize our highest priority areas of concern, which are Provisions C.3 (New Development and Redevelopment, especially the Green Infrastructure provision) C.11/12 (Mercury and PCBs Controls), and C.14 (City of Pacifica and San Mateo County Fecal Indicator Bacteria Controls). Specific to Provision C.14, the County requests consistency between the permit, the San Pedro Creek and Pacifica State Beach Bacteria TMDL Best Management Practices Implementation Plan and Monitoring Plan, and the Basin Plan Amendment.

While we generally agree with the overall goal of the revised MRP, our intent for these comments is to illuminate the County's constraints and provide recommendations to the permit that will result in additional permit revisions to create a practical and effective permit. For each priority issue that we identified, we provide a recommended revision to the Tentative Order.

For detailed comments on other sections of the permit, please refer to the comment letter submitted separately by the San Mateo Countywide Clean Water Program (SMCWPPP).

C.3 - NEW DEVELOPMENT AND REDEVELOPMENT

C.3.h. – Operation and Maintenance of Stormwater Treatment Systems

- **Remove burden of municipal staff of inspections**: The County recommends removing the requirement of municipal staff to inspect pervious paving systems greater than/equal to 3,000 sq. ft. The added language demonstrates and codifies a suspicion of property owners that is unfounded and, in turn, places additional burden on municipalities with limited staffing and whose actions to recover costs are also limited. While municipalities are currently successful in implementing O&M requirements of the past permit, municipalities are not equipped for a large increase in O&M Inspections of unregulated projects. Pervious pavements should not be

required to be tracked and inspected, instead, the County recommends that Permittees provide educational information on proper maintenance of pervious pavement to the property owner. If such a requirement is adopted, Property Owners could have a civil engineer certify in writing every 5 years that the area of pervious paving is still there or was replaced with an equivalent measure. The County appreciates the effort you and your staff have already made and will make to increase the efficiency of the O&M inspection and reporting process in the draft permit.

C.3.j - Green Infrastructure Planning and Implementation

This provision will be one of the most challenging portions of C.3 to implement and has a significant level of uncertainty in terms of what will constitute compliance. It also appears that the level of effort and resources required to implement Provision C.3 could be dramatically higher than implementing MRP 1.0 due to the new Green Infrastructure (GI) requirements, and will be especially challenging within the proposed time frames. We suggest the following recommendations:

- **Adjust the GI planning and implementation timeline**: Provide additional time to complete and obtain governing body approval of the GI framework; e.g. extend the deadline to the required reporting within two years of the permit effective date. Provide the entire permit term to complete the GI Plan and required components (e.g. updated planning documents, standards, specifications and design details).

  The County's primary concern regarding the timeline is due to the amount of time required to coordinate and prepare the GI Plan and associated documents, and the amount of time required to obtain and allocate adequate funding for such a large-scale and long-term planning effort. For example, the County is on a two-year budget cycle; budgets for FY 15-16 were recently adopted in June of 2015. In order to conduct the necessary planning, prepare the GI Plan, and implement early GI projects, the County would need to modify the existing budget and reallocate funds away from other stormwater tasks, maintenance activities, and essential services. Additionally, the County needs sufficient time to seek grant funding, coordinate resources with outside agencies (e.g., CalTrans and MTC), and potentially complete the Prop 218 process for creating/increasing the existing stormwater fee. The County also anticipates that the amount of time for mapping and prioritization, interdepartmental coordination, training/hiring staff, preparing RFPs, hiring consultants, and revising associated plans (e.g., General Plan, transportation and bicycle plans, storm drain plans, community specific roadway design standards) will be more than a 2-year planning effort. Revision of associated plans and the GI Plan will need approval by the County Board of Supervisor and public and environmental review; all of which require a significant amount of time.

- **Focus on future projects**: Provision C.3.j.ii requires early implementation of GI, focused on identifying and implementing public projects that have potential for GI measures (including LID treatment) within the permit term. It is unclear how compliance with this section will be determined. The process for review of planned capital projects needs to be more defined and objective, in order to avoid disagreements with Regional Water Board staff as to what are "missed opportunities". There also needs to be the recognition that while it may be technically feasible to add LID features to a capital project, the funding for the additional features and the ongoing maintenance of the LID features may not be available.

Implementation (i.e., design and construction) during the permit term of GI projects that are not already planned and funded will be very challenging for the County. Efforts during the MRP 2.0 term should focus on future development of long-term GI Plans and opportunistic implementation of GI projects where feasible and where funding is available. It is unlikely that the County would be able to secure funding for capital improvement projects already in design phase to incorporate LID features. The County recommends that the permit focus on future projects; moving forward, the County is committed to Green Infrastructure.

C.11 - MERCURY CONTROLS

Provisions C.11.a – c in the Tentative Order generally parallel C.12.a – c. Therefore, the below comments on those provisions for C.12 (PCBs Controls) also generally apply to C.11 (Mercury Controls).

C.12 - PCBs CONTROLS

As for Provision C.3, the level of effort and resources required to implement Provision C.12 will be dramatically higher than the previous permit and the proposed timeframe is too short and does not align with what is proposed for development and implementation of the GI Plan. The lack of control over redevelopment and demolition will significantly affect the County's success with load reduction and the potential extent of the "hot spots," creates a high level of uncertainty in achieving the 3 kg/year load reduction performance metric and successful implementation of Provision C.12 . Our overarching concerns are that:

1. Existing data, which is biased by targeted reconnaissance of suspected source areas, indicates that very few areas within San Mateo County contain significant concentrations of PCBs (greater than 0.5 parts per million).
2. C.12 does not appear to be based on adequate data to identify target areas where significant load reduction will be achieved.
3. The proposed C.12 requirements do not provide a clear and feasible pathway to attaining compliance with the load reduction requirements since acceptable control measures are not established.

The quality of source area/Hot Spot identification is paramount to the success of load reduction efforts. To that end, San Francisco Estuary Institute (SFEI) has developed a draft report (Draft Report)[1] to help "highlight the need for an increasing focus on finding watersheds and land areas within watersheds at a scale paralleling management efforts (areas as small as polluted sub-watersheds, polluted "patches" of old industrial land use, or polluted source properties)." The Draft Report identified two main areas where data improvement still exists: 1) the identification of source properties (where focused effort using clean up and abatement techniques will cost-effectively remove large PCB masses); and 2) the ongoing need to identify areas of watersheds and subwatersheds where the application of green infrastructure and other redevelopment strategies will cost-effectively remove moderate PCB masses, with added benefits for mercury and other pollutants.

SFEI further concludes that:

[1] Sources, Pathways and Loadings: Mulit-Year Synthesis [Draft for Review]. Prepared by Lester J. McKee, A. N. Gilbreath, et al. San Francisco Bay Institute, Richmond, California. April 20, 2015

> "To address these weaknesses, there remains a need for further identification of more industrial patches and source properties and to identify and rank high leverage tributaries in relation to sensitive areas on the Bay margin. In addition to these high priority information weaknesses, the RWSM needs to be calibrated using improved parameterization and a greater number of source area rich calibration watersheds such that the model can be used to provide baseline loads to support planning analyses of management practice loading reduction potential. Knowledge about the performance of each management measure in relation to contamination levels in the landscape remains weak and there is presently no science basis for the design of a trends monitoring program to assess progress towards load reductions and improved environmental quality downstream."

The County is aware of approximately 222 urban and/or nonurban storm drain sediment samples that have been collected during numerous investigations county-wide between 2007 and 2015. Of this data, less than 10 percent (only 20 samples) of data exceeded one part per million (ppm) and the average and median concentrations are 0.979 ppm and 0.079 ppm, respectively. Within unincorporated San Mateo County, only 13 sample points exist and none of the data exceeds one ppm. The average and median concentrations in unincorporated San Mateo County are 0.138 and 0.056 ppm, respectively. On the whole, the vast majority of data is low in concentration and may be difficult to capture outside of the target areas.

Development and implementation of control measures will require additional data, which takes considerable time. As part of the sample collection, monitoring performed in San Mateo County consists of samples that were collected in February 2015. The anticipated publication date of the report for that monitoring event is September 2015. Accounting for planning and work plan preparation, nearly a year was needed to conduct the latest round of monitoring, underscoring the need for additional time to effectively collect and evaluate data.

Significant PCB target areas need to be identified prior to implementing control measures in order to manage public resources effectively. The County is concerned about committing resources for load reduction without first identifying verifiable target areas, which may result in irresponsible expenditure of resources that do not contribute to improving the Bay. Sufficient data is critical to assigning priority, funding, and jurisdictional obligation to specific cleanup/load reduction efforts. Attempting to reduce discharges from widespread areas of very low level PCBs will likely be difficult to capture, and is not anticipated to mitigate or offset the more significant PCB contamination existing in the Bay.

C.12.a – Implement Control Measures to Achieve Load Reductions

- **Focus on implementation of PCBs control programs**: Load reduction performance criteria should not be the point of compliance. Compliance should be based upon implementing PCBs control programs designed to achieve a load reduction target, based on an interim accounting method. The target would be informed by what the BMP programs could achieve, based on the accounting system, which should be agreed upon by the Permittees and the Water Board upfront and incorporated into the permit.

At a minimum, the revised permit should specify actions identified in June 10, 2015 Staff Summary Report[2], such as:

- Control of PCB-containing wastes during building demolition;
- Storm drain and street cleaning in areas with high PCB levels;
- Cleanup and referral to the Water Board for cleanup of sites contaminated with high levels of PCBs;
- Diversion of first-flush stormwater runoff and dry weather flows to the sanitary sewer; and
- Green infrastructure retrofit of streets and storm drain systems.

As recommended By SFEI,[3] the County recommends that the Water Board allow source control actions that result in:

- A large amount of PCBs and total mercury being removed from as few locations as possible. Thus it is important to find as many high leverage properties and source areas as possible.
- Potential multiple benefits - for example both PCBs and HgT pollution or other pollutants such as trash or unsightly housekeeping that can be dealt with at the same time
- Clear connection between the *in situ* pollutant and stormwater conveyance - for example evidence of off-site transport from the polluted area directly to a municipal storm drain inlet or some other conveyance system.

- **Adjust timelines**: Extend the deadlines for reporting and align timeline with the GI planning time frame. The County recommends a modified timeline to allow for more time to collect additional data, to confirm sources, and to plan GI projects as required by C.3. An adjusted timeline is necessary to prepare for implementation and assessment.

C.12.b. Assess Load Reductions from Stormwater

- **Modifying performance criteria**: PCBs load reduction performance criteria should be in the form of Numeric Action Levels or benchmarks. In addition, the permit should include contingency language that would allow for achieving compliance if a good-faith demonstration of efforts and actions by Permittees consistent with permit requirements falls short of achieving the load reduction performance criteria. The permit should protect the Permittees from third party litigation should good-faith efforts fall short of meeting load reduction mandates.
- **Delete C.12.b.iii requirement for submitting Permittee-specific proportions of load reduction responsibilities:** Provision C.12.b.iii requires that Permittees submit Permittee-specific proportions of load reduction responsibilities and supporting data to the Water Board by April 1, 2016 – four months after the effective date of the permit. Although Permittees and the RMP have spent considerable time and resources towards identifying PCB hot spots and watersheds producing greater levels of PCBs to the Bay, data have not been collected

[2] San Francisco Bay Region, Water Quality Control Board, Staff Summary Report. Item 8 for the hearing to receive testimony on Tentative Order, all sections except Provision C.10, Trash Load Reduction. June 10, 2015.
[3] Sources, Pathways and Loadings: Mulit-Year Synthesis [Draft for Review]. Prepared by Lester J. McKee, A. N. Gilbreath, et al. San Francisco Bay Institute, Richmond, California. April 20, 2015

at a level to which proportions of load reduction responsibilities could confidently be assigned to Permittees. Furthermore, assigning Permittee-specific responsibilities with high levels of uncertainty upon which compliance could be based is not good public policy and could inadvertently place responsibilities upon certain Permittees requiring the spending of public resources towards unfounded goals not based on actual water quality data.

The County recommends removing the requirement to develop and submit Permittee-specific proportions of load reduction responsibilities.

C.12.c. Plan and Implement Green Infrastructure to Reduce PCBs Loads

- **Remove Provision C.12.c**: It is unnecessary to include performance criteria (120 g/year over the final three years of the permit term) for PCBs load reductions through implementation of GI over the reissued permit term. PCBs load reductions will not be the driver for GI implementation during the reissued permit term. Regional Water Board staff has noted that based on extrapolation of data from the current permit term, the proposed metrics should be met via redevelopment in old industrial areas; however, redevelopment is uncertain and beyond the County's control. As per our comments on C.3, we recommend that the entire permit term be focused on GI planning with widespread implementation planned to take place in subsequent permit terms.

  The County recommends removing Provision C.12.c. The actual load reductions that Permittees expect to achieve via GI will be determined during the planning and reasonable assurance analysis required by Provision C.12.d., as part of planning for achieving the overall PCBs TMDL allocations.

C.12.f. Manage PCB-containing Materials and Wastes during Building Demolition

- **Encourage statewide/federal program approach**: Meeting the Tentative Order's three year timeframe to develop a program to manage PCBs in building materials and wastes during demolition would likely require administration at the local level. This approach would result in highly inefficient use of scarce public funds and likely be ineffective at comprehensively and consistently addressing the problems. Allow at a minimum the entire permit term for Permittees to work with the State, USEPA, the building industry, and other stakeholders to attempt to develop a comprehensive statewide or federal program analogous to current programs for asbestos and lead paint. Given the multiple environmental and public health issues in play, USEPA should play a large role in development of this program.

C.14 – CITY OF PACIFICA AND SAN MATEO COUNTY FECAL INDICATOR BACTERIA CONTROLS

Table 14.1. Numeric Targets, TMDLS, and Allocations Based on Allowable Exceedances of Single Sample Bacteria Objectives for San Pedro Creek and Pacifica State Beach

- **Delete Table 14.1:** The County believes that Table 14.1 should be deleted because Section 7.4.1.6 (pg. 7) of the Basin Plan Amendment (BPA) states that the Water Board will not include numeric limits, based on the wasteload allocations in the NDPES permit, if the discharger demonstrates that it has fully implemented technically feasible, effective and cost efficient BMPs to control all controllable

anthropogenic sources. However, the County and City of Pacifica have not yet been given the chance to demonstrate how effective its BMPs are. Furthermore, Section 7.4.1.5 of the BPA states that "dischargers are collectively responsible" for meeting the allowable exceedance-based wasteload allocations in Table 14.1. Several sources in addition to municipal stormwater runoff and dry-weather flows contribute bacteria to receiving waters. These include wildlife, sanitary sewer systems, and horse facilities, over which the County has little to no control.

C.14.a. – Implement Control Measures to Achieve Indicator Bacteria Wasteload Allocations

- **Delete C.14.a.ii (1) requirement for addressing illicit discharge from sanitary sewer lines:** The County recommends removing Provision C.14.a.ii (1) because the County believes that it is inappropriate to include controls for sewer system in a stormwater system permit. Section 7.4.1.6 (pg. 6) of the BPA states that the Responsible Parties and Jurisdictions for the wasteload allocation for sanitary sewer systems will be implemented through the requirements and provisions of the Statewide General Waste Discharge Requirements Order for sanitary sewer systems and the CDO. The BPA does not mention the MRP as one of those jurisdictions. Thus, this MRP provision conflicts with the BPA.

- **Adjust timeline/provide flexibility in language for sewer line repairs/replacement**: If Provision C.14.a.ii (1) is kept in the Permit, the County recommends extending the timeframe to repair or replace failing sewer lines or changing Permit language to provide Permittees with flexibility in meeting time frame.

  Depending on extent of sewer line repairs/replacement, it may be difficult for Permittees to meet six month time frame outlined in Permit. At the County, expenditures over a certain dollar amount require approval from the Board of Supervisors, thus extending the timeframe to complete repairs/replacement. Permit language could be changed to provide Permittees with more flexibility to complete repairs/replacement. For example, permit could be changed to require repair/replacement within six months of discovery "at extent possible" or require repairs/replacement "to be *initiated* within six months of discovery."

C.14.b. Conduct Water Quality Monitoring to Assess Attainment of Wasteload Allocations

- **Delete C.14.b.iii.(1)(e) requirement for submitting plan describing additional control measures if wasteload allocations are not met by end Permit term:** The County believes the provision in section C.14.b.iii.(1)(e) requiring a plan describing additional control measures or increased levels of existing measure to attain wasteload allocations should be deleted because it contradicts the BPA directive for an adaptive management plan and accelerates the wasteload allocation timeline.

  Section 7.4.1.8 (pg. 10) of the BPA states that Adaptive Implementation should be used to adapt the TMDL and implementation plan to incorporate new and relevant science. As such, the BMP and Implementation Plan for the TMDL watershed was developed with an adaptive and iterative approach. Requiring a new plan in Year 4 contradicts the BPA requirements for Adaptive Implementation.

Moreover, the requirement modifies and accelerates the wasteload allocation timeline approved by Regional Water Board and State Water Board contained in the BPA. The wasteload allocation timeline approved by Regional Water Board and State Water Board in the BPA sets deadlines to meet wasteload allocations within 8 years of effective TMDL date for Pacifica State Beach and within 15 years for San Pedro Creek Watershed.

- **Delete Section C.14.b.iii.(1)(e):** Provision C.14.b.iii.(1)(e) requires Permittees to submit an assessment by the end of Year 4 of the Permit term if wasteload allocations are not achieved. Permit is unclear on specific provisions of assessment at end of Year 4 and how this assessment would provide additional benefit to the annual TMDL Status and Monitoring report. The County suggests that this requirement be deleted and, in its place, additional reporting requirements or data analysis for this assessment be outlined as a provision of the TMDL report in Year 4 under Section C.14.b.iii.

C.14.c. – Conduct Water Quality Monitoring to Characterize Sources of Bacteria in The Project Area and to Asses BMP Facilities

- **Reference to San Pedro Creek and Pacifica State Beach Bacteria TMDL Best Management Practices Implementation Plan and Monitoring Plan**: In accordance with State Water Resources Control Board Resolution No. 2013-0007 approving the Basin Plan Amendment establishing the TMDL for bacteria in San Pedro Creek and at Pacifica State Beach, the County, in collaboration with the City of Pacifica, developed the San Pedro Creek and Pacifica State Beach Bacteria TMDL Best Management Practices Implementation Plan and Monitoring Plan (TMDL BMP and Monitoring Plan). This Plan was updated and revised following comments from Water Board staff and contains the control measures and monitoring elements required by Provision C.14. Provision C.14 in its entirety and C.14.c in particular should be revised to reference this Plan, rather than detail the specific requirements of the Plan.
- **Assurance of use of characterization monitoring results:** The County would like assurance that the results of the County's and City of Pacifica's characterization monitoring will be taken into account for any future evaluations of the TMDL watershed. Past characterization studies have been conducted in the watershed revealing that exceedances are likely a result of uncontrollable sources that do not have an anthropogenic source such as wildlife (specifically avian wildlife). However, results of these studies were discounted by Water Board staff when discussing TMDL BMP and Monitoring Plan.
- **Revise Provision C.14.c.ii.(1) to change sampling station requirements for characterization monitoring:** Permit requires that Permittees conduct characterization monitoring at a minimum of twelve selected sampling stations in WY 2016 and every other year. The County suggests revising this provision to require characterization monitoring at twelve sampling stations in WY 2016 and then in subsequent years require Permittees to "collect a minimum of one hundred (100) pathogen indicator bacteria samples per water year."

  The requirement to monitor at twelve stations every year of monitoring does not allow the County and City flexibility to intensify sampling at select stations or expand the geographic scope of the program based on monitoring results. Section 7.4.1.8 of the BPA states that "The Water Board will adapt the TMDL and implementation plan

to incorporate new and relevant scientific information such that effective and efficient measures can be taken to achieve the allocations." The TDML BMP and Monitoring Plan approved by Regional Board staff is based on an iterative monitoring approach, which is not reflected in the Permit language.

Requiring a minimum number of samples (rather than a number of sampling locations and events) is the same approach required in Provision C.8.f. (Pollutants of Concern Monitoring) of the Permit, which allows for flexibility without diminishing level of effort. Permittees would have to collect same number of samples, but be allowed to change number and location of characterization monitoring sample sites based off results of monitoring from previous years. Changes in monitoring locations would be used to better characterize sources of bacteria and measure effectiveness of control measures.

- **Note on definition for "wet weather":** Provision C.14.c.ii(2) states that wet weather is "any day with .1 inch or more and following three days," as defined in the TMDL. The County would like to note that other regulating agencies have a significantly higher rainfall threshold for defining wet weather event. For example, in a Streambed Alteration Agreement, the CA Department of Fish and Wildlife, defines wet weather as "when there has been ¼ inch of rain within a 24-hour period" (language was used for installation of LWD [large woody debris] in a stream; Notification #1600-2011-0139-R3 Streambed Alteration Agreement for project in Soquel Demonstration State Forest).

- **Delete the requirement to analyze samples for human-, horse-, and dog-specific genetic markers from Provision C.14.c.ii.(3); alternatively, limit these constituents to WY2016 monitoring:** The Permit is not clear whether these constituents should be analyzed beyond Water Year (WY) 2016. As described in the TMDL BMP and Monitoring Plan, the County and City are committed to conducting this type of monitoring in WY2016. However, results from prior studies conducted in the San Pedro Creek Watershed using these methodologies were discounted by Water Board staff when discussing TMDL BMP and Monitoring Plan. Genetic marker analyses are very costly and the value of repeating them beyond WY2016 is uncertain both in terms of scientific knowledge gained and Water Board acceptance of any findings from the sampling.

- **C.14.c.ii.(5) - Delete the requirement for review and acceptance of any and all changes to the characterization monitoring plan in subsequent years (e.g., WY2018, WY2020, etc.).** Characterization monitoring, as described in the TMDL BMP and Monitoring Plan and Provision C.14.c.i. is intended to be iterative in nature and allow for flexibility of design and details in years subsequent to WY2016. Executive officer review and acceptance of changes to the plan may be lengthy and/or result in unnecessary additional investigation with unknown cost and schedule implications.

ATTACHMENT A – FACT SHEET

- **In the fact sheet findings in support of Provision C.14, add acknowledgement of ecological differences between TMDL watershed and reference watershed:** The County believes that the fact sheet finding for Provision C.14 should include an acknowledgement that the reference composite watersheds used to set the bacteriological water quality objectives in the BPA differs

ecologically from the Pacifica State Beach/San Pedro Creek watershed. Water availability is one of the most significant factors that contribute to the current vegetation distribution and successional patterns along the CA coast (Hsu et al. 2012). Pacifica State Beach and the San Pedro Creek watershed experiences additional moisture input from the coastal fog which increases the productivity and diversity of the vegetation communities found in the watershed. Productive habitats provide additional shelter and forage and are able to support increased populations of wildlife. The composite reference sites are from southern California, where moisture is the limiting factor for vegetation productivity along the coast and further inland. The RWQCB has not considered the ecological differences between the reference site and the San Pedro Creek watershed adequately to accommodate for additional bacteria loading from wildlife sources due to differences in the ecological communities.

We look forward to continuing to work with you and your staff to resolve the issues described in this letter. Please contact me at 650/363-4598 or Jim Eggemeyer, Director, Office of Sustainability at 650/363-4189 if you have any questions or would like to further discuss any of our comments.

Sincerely,

Peggy Jensen
Deputy County Manager

C.C. John Maltbie, County Manager
John Beiers, County Counsel
Jim Eggemeyer, Director, Office of Sustainability