Appendix C

Response to Comments

California Regional Water Quality Control Board
San Francisco Bay Region

RESPONSE TO WRITTEN COMMENTS

On October 2012 Tentative Order for
Sewerage Agency of Southern Marin, Marin County

The Regional Water Board received written comments from the Sewerage Agency of Southern Marin (Discharger) and the San Francisco Baykeeper (Baykeeper) on a tentative order distributed for public comment. This response to those comments summarizes each comment in *italics* (paraphrased for brevity) followed by a staff response. Revisions are shown in ~~strikethough~~ for deletions and underline for additions. For the full content and context of each comment, refer to the comment letters.

Sewerage Agency of Southern Marin

Discharger Comment 1

The Discharger requests that the portion of the wastewater collection system owned and operated by the Discharger be consistently referred to as the wastewater collection and interceptor conveyance system.

Response to Discharger Comment 1

We agree and revised Table 1 of the tentative order as follows, with similar revisions to Table 4 and Table F-1:

Table 1. Discharger Information

Discharger	Sewerage Agency of Southern Marin
Name of Facility	Sewerage Agency of Southern Marin Wastewater Treatment Plant and its wastewater collection and interceptor conveyance system
CIWQS Place Number	255788
⋮	⋮

We revised section II.B.2 of the tentative order as follows:

2. **Collection System.** The Discharger owns and operates ~~an interceptor~~ sewer pipelines that collect wastewater and convey~~s~~ wastewater from the member agencies' satellite collection systems to the Plant. ~~There are no residential or commercial connections to the interceptor.~~ The Discharger's ~~conveyance~~ wastewater collection and interceptor conveyance system consists of approximately 3.5 miles of force mains, 5.5 miles of gravity lines, and six pump stations. Under agreement with the City of Mill Valley, the Discharger operates two lift stations within the Mill Valley service area (e.g., Frontage Road Lift Station, Shelter Bay Lift Station). Each of the satellite collection systems is owned and operated independently and collects wastewater from its respective

service area. These collection systems, and the Discharger's wastewater collection and interceptor conveyance system, ~~The collection systems and the interceptor system~~ are covered under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ).

We revised section VI.C.4.b of the tentative order as follows:

b. Sanitary Sewer Overflow and Sewer System Management Plan

The Discharger's wastewater collection and interceptor conveyance system is part of the facility subject to this Order. As such, the Discharger shall properly operate and maintain its wastewater collection and interceptor conveyance system (Attachment D, section I.D). The Discharger shall report any noncompliance (Attachment D, sections V.E.1 and V.E.2) and mitigate any discharge from the Discharger's wastewater collection and interceptor conveyance system in violation of this Order (Attachment D, section I.C)….

We revised Fact Sheet section II.A.2 as follows:

2. Collection System. The Discharger owns and operates ~~an interceptor~~ sewer pipelines that collect and convey~~s~~ wastewater from the member agencies' satellite collection systems to the Plant. ~~There are no residential or commercial connections to the interceptor.~~ The Discharger's conveyance system consists of approximately 3.5 miles of force mains, 5.5 miles of gravity lines, and six pump stations. Under agreement with the City of Mill Valley, the Discharger operates two lift stations within the Mill Valley service area (e.g., Frontage Road Lift Station, Shelter Bay Lift Station). Each of the satellite collection systems is owned and operated independently from the Discharger and collects wastewater from its respective service area. These collection systems, and the Discharger's wastewater collection and interceptor conveyance system, ~~The collection systems and the interceptor system~~ are covered under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ).

Discharger Comment 2

The Discharger requests that the phrase "Standard Operating Procedures (SOPs) Program" be inserted after "Operation & Maintenance Manual" in Discharge Prohibition III.C. Plant personnel use SOPs to implement wet weather management activities, in addition to using the Operations and Maintenance Manual.

Response to Discharger Comment 2

We disagree. A reference to standard operating procedures in Prohibition III.C would have no context, because the prohibition refers to Attachment G. Attachment G is standard in all wastewater permits and requires the Discharger to maintain an Operation and Maintenance Manual; it does not refer to separate standard operating procedures. The Discharger can accomplish its desired outcome by making its standard operating procedures a component of its Operations and Maintenance Manual (e.g., by incorporating them by reference).

Discharger Comment 3

The Discharger requests that section VI.C.2 of the Order be revised so Monitoring Location EFF-001 is not the only monitoring location for the Effluent Characterization Study. The Discharger recommends including Monitoring Locations EFF-001D and EFF-001B.

Response to Discharger Comment 3

We disagree. The two locations suggested cannot be included because they would not be representative of the Discharger's discharge under normal conditions. The intent of the Effluent Characterization Study is to evaluate the discharge and to verify if the "no" or "cannot determine" reasonable potential analysis conclusions of the Order remain valid. As such, the monitoring location must be representative of the discharge under normal operating conditions. Monitoring Location EFF-001B is for blending events that do not reflect normal operating conditions. Monitoring Location EFF-001D is for residual chlorine monitoring and would include the combined effluents from the Discharger and the Sanitary District No. 5 of Marin County (Tiburon) who share the outfall with the Discharger. Thus, monitoring station EFF-001D cannot provide site-specific priority pollutant data for the Discharger's plant.

Discharger Comment 4

The Discharger requests that Table 8, Task 8, be revised so the Discharger must first consider whether it is feasible to develop a flow-based rate structure before it actually develops one for its Board of Commissioners to consider. The Discharger contends that development and implementation of a flow-based rate system may be infeasible.

Response to Discharger Comment 4

We disagree. We believe it is feasible for the Discharger to develop a flow-based rate structure for its board's consideration. A flow-based rate structure could provide an incentive for satellite collection systems to reduce inflow and infiltration, which are the causes of blending at the plant. We contend that it is feasible for the Discharger to measure or estimate flows from the collection systems it serves, if not immediately, then eventually. Moreover, Table 8, Task 8, merely requires that a flow-based rate structure be developed for consideration. It does not dictate the manner in which flows should be determined and accounted for in assessing any fees. The recently adopted NPDES permit for the Central Marin Sanitation Agency includes similar requirements.

Discharger Comment 5

The Discharger requests that Table 8, Task 9, be revised so the State Water Resources Control Board, instead of the Discharger, is responsible for assessing and promoting inflow and infiltration reduction. The Discharger points out that its member agencies' collection systems are regulated under the State Board's General Water Discharge Requirements for Sanitary Sewer System. The Discharger further contends that under the Joint Powers Agreement, it has no authority to assess the adequacy of its member agency activities or to encourage additional inflow and infiltration reductions.

Response to Discharger Comment 5
We disagree. The Discharger is a joint powers authority made up of its six member agencies. The Discharger can request information from its member agencies (although it cannot force them to provide any information) and evaluate the information it receives. Because inflow and infiltration are the causes of blending, the Discharger has an interest in, and responsibility for, leading efforts to minimize peak flows from its member agencies.

Discharger Comment 6
The Discharger requests that the Facility Map (Attachment B, Figure B-1) be revised to indicate the location of Raccoon Strait and to accurately identify the outfall location.

Response to Discharger Comment 6
We agree and revised Attachment B.

Discharger Comment 7
The Discharger requests that total residual chlorine monitoring requirements during blending events (Monitoring and Reporting Program Table E-4) be revised to allow continuous measurements only. The Discharger says its current monitoring practices include continuous monitoring and it plans to continue this practice.

Response to Discharger Comment 7
We revised the tentative order to retain more flexibility. After discussing the matter with the Discharger, we revised the tentative order to give the Discharger a choice: it can collect either "grab" or "continuous" samples, regardless of whether blending is taking place. Specifically, we revised Monitoring and Reporting Program Table E-3 as follows:

Table E-3. Effluent Monitoring at EFF-001 or EFF-001D

Parameter	Units[1]	Sample Type[2]	Minimum Sampling Frequency[3]
⋮			
pH[7]	Standard Units	Continuous	Continuous/D
Total Residual Chlorine[8]	mg/L	Grab or Continuous	Continuous/H
Total Coliform Bacteria	MPN/100 mL	Grab	1/Week
⋮			

Discharger Comment 8
The Discharger requests that the Order retain the chronic toxicity test dilution series -- 40%, 20%, 10%, 5%, and 2.5% -- from the previous order. The Discharger cites USEPA's "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms" to support use of the existing dilution series.

Response to Discharger Comment 8
We agree and revised Monitoring and Reporting Program section V.B.1.e as follows:

e. Dilution Series. The Discharger shall conduct tests at ~~50~~ 40%, ~~25~~ 20%, 10%, 5%, and 2.5%. The "%" represents percent effluent as discharged.

Discharger Comment 9

The Discharger requests that Monitoring and Reporting Program Appendix E-1, section II.A.2, be revised to reflect that the Discharger may continue to conduct toxicity screening with Sanitary District No. 5 of Marin County (Tiburon) and the Sausalito-Marin City Sanitary District.

Response to Discharger Comment 9

We agree and revised Monitoring and Reporting Program Appendix E-1, section II.A.2, as follows:

2. Prior to permit reissuance. Screening phase monitoring data shall be included in the NPDES permit application for reissuance. The information shall be as recent as possible, but may be based on screening phase monitoring conducted within 5 years before the permit expiration date. The Discharger has the option of completing the screening phase monitoring on its own or in conjunction with other local dischargers.

Discharger Comment 10

The Discharger requests that the Facility WDID in Fact Sheet Table F-1 be corrected.

Response to Discharger Comment 10

We agree and revised Table F-1 as follows:

Table F-1. Facility Information

WDID	~~2 211000240~~ 2 215015001
CIWQS Place ID	255788
⋮	

Discharger Comment 11

The Discharger requests that the Fact Sheet be revised to reflect the funding status of the private lateral replacement program. The Discharger clarifies that it will support the private lateral replacement program only while funds exist. When funds are depleted, the program will be implemented under point of sale ordinances.

Response to Discharger Comment 11

We agree and revised Fact Sheet section II.F as follows:

F. Blending Summary

Blending, as defined in the previous order, occurred three times over the previous order term, totaling more than 0.69 million gallons….

The Discharger implemented various measures during the term of the previous order to reduce blending, including the following:

- Upgrading….
- Reducing….
- Collaborating with all six member agencies to reduce inflow and infiltration in their respective collection systems (e.g., completing a hydraulic profile of the service area, and developing and implementing a private lateral replacement program to assist private residence owners in replacing defective private lateral lines while funding exists).

Discharger Comment 12

The Discharger requests that the Fact Sheet be revised to reflect that, during the term of the previous order, the Discharger and its member agencies implemented a long-term (10-year) capital replacement program.

Response to Discharger Comment 12

We agree and revised Fact Sheet section IV.A.3.b as follows:

b. There are no feasible alternatives to the bypass. The Discharger asserts in its Utility Analysis that increasing treatment capacity through the purchase of and construction on bordering property is infeasible because the bordering property is in close proximity to tidal wetlands. Nonetheless, it identified various alternatives in an external audit report, dated August 31, 2008, conducted in partial fulfillment to the CAO requirements. During the term of the previous order, the Discharger and its member agencies implemented measures achievable and developed ~~short-term (5-year) and~~ long-term (10-year) capital replacement programs to reduce blending for the coming years….

Discharger Comment 13

The Discharger requests that the permit reissuance date in Fact Sheet section VI.C be revised for consistency.

Response to Discharger Comment 13

We agree and revised Fact Sheet section VI.C.2 as follows:

2. Chronic Toxicity. This Order establishes a requirement for the Discharger to conduct chronic toxicity testing twice a year to ensure the discharge has acceptable low levels of chronic toxicity. The Discharger conducted an effluent toxicity screening study during the previous order term. The study concluded that the *Americamysis bahia* (mysid shrimp) was the most sensitive marine species. The permit, therefore, requires the use of *Americamysis bahia* as the chronic toxicity test species. The Discharger is to re-screen in accordance with Monitoring Reporting Program Appendix E-1 after any significant change in the nature of the effluent or prior to submittal of the application for permit reissuance, due ~~January~~ July 31, 2017. The Discharger has an option to complete the screening on its own or in conjunction with other local dischargers.

San Francisco Baykeeper

Baykeeper Comment

The Baykeeper requests that Monitoring and Reporting Program Tables E-3 (routine effluent monitoring) and E-4 (monitoring during blending) be revised to include daily monitoring of the effluent for dissolved oxygen and dissolved sulfides. It contends that blended discharge consists of undertreated sewage and urban stormwater, which has the potential to reduce dissolved oxygen in the receiving water to levels that pose a significant threat to aquatic life. The Baykeeper further points out that this requirement is consistent with the Basin Plan and other NPDES permits.

Response to Baykeeper Comment

We disagree. We acknowledge that some of our permits may contain inconsistent monitoring requirements for dissolved oxygen and sulfides, and we will work to resolve the inconsistencies as we reissue them. We do not believe, however, that monitoring effluent for dissolved oxygen and sulfides is necessary, regardless of whether blending is taking place.

Effluent dissolved oxygen concentrations correlate little, if at all, with receiving water dissolved oxygen concentrations. Biochemical oxygen demand (BOD), which is a measure of the effluent's organic matter content, has a far greater effect on receiving water conditions because receiving water organisms consume oxygen in the water when they break down organic matter. This decreases oxygen concentrations in the receiving water, which in turn causes sulfide concentrations to rise (sulfides remain low in an oxygenated environment). This Order contains BOD effluent limitations that apply even when blending takes place. By controlling BOD, we ensure that dissolved oxygen and sulfides in the receiving water meet water quality standards. This Order requires routine weekly BOD monitoring and, when blending, daily BOD monitoring if total suspended sediment concentrations are high.

Staff-Initiated Revision

In addition to minor editorial and formatting revisions, we revised Table 8 as follows for better consistency with the Regional Water Board's recently adopted NPDES permits for the Central Marin Sanitation Agency and the Sausalito-Marin City Sanitary District.

Table 8. Specific Tasks to Improve Wet Weather Management and Reduce Blending

Task	Compliance Date
1. Develop and Implement Wet Weather Improvement Plan. The Discharger shall, in cooperation with its member agencies, develop a comprehensive Wet Weather Improvement Plan that establishes measurable goals to minimize and eventually eliminate blending due to	August 1, 2013

Task	Compliance Date
wet weather events. The Plan shall consolidate (1) relevant components from existing sewer management programs, including, but not limited to, the Sewer System Management Plan (SSMP), Sewage Spill Reduction Action Plan (SSRAP), and Private Lateral Replacement Programs; (2) findings from existing reports, including, but not limited to, the External Audit Report, dated August 31, 2008, the Discharger's response to the External Audit Report, dated July 13, 2009, and the Utility Analysis, dated April 3, 2012; (3) required actions from USEPA Administrative Order No. CWA-309(a)-08-030, dated April 10, 2008; and (4) any other actions and activities the Discharger deems necessary and effective to minimize peak wet weather flow to the Plant. The Plan shall specify measures to be implemented at the Plant and the Discharger-owned wastewater collection system, and identify their costs, implementation schedules, and proposed funding mechanisms. In addition, the Plan shall describe the Discharger's strategy to work with its member agencies to reduce peak wet weather flows (e.g., establishing quantifiable goals in the reduction of inflow and infiltration [I/I]). The Discharger shall clearly identify in the Plan the measures to be undertaken during the term of this Order. <u>The Discharger shall describe the extent to which implementing these measures (at the Plant and in the collection systems) will improve wet weather management</u>. The Discharger shall incorporate feedback, if any, from the Executive Officer and begin implementation of the Plan by the compliance date specified.	
2. Report Progress on Implementing Wet Weather Improvement Plan. The Discharger shall evaluate and report on the implementation and effectiveness of its Wet Weather Improvement Plan annually.	Annually, with Annual Self-Monitoring Report due February 1
3. Report Progress on Private Sewer Lateral Programs. The Discharger shall report on the implementation of its Private Lateral Replacement Programs. It shall also report any trends in the number and length of private sewer laterals replaced or repaired, and significant changes to existing private sewer lateral programs by its member agencies. This report may be part of the Wet Weather Improvement Program Progress Report.	Annually with Annual Self-Monitoring Report due February 1
4. <u>Encourage</u> Private Sewer Lateral Ordinance Development. The Discharger shall encourage its member agencies to develop proposed revisions to their respective sewer use ordinance<u>s</u> to require inspection of private sewer laterals for homeowners upon change of property ownership.	August 1, 2013
5. Report Progress on Private Sewer Lateral Ordinance Status. The Discharger shall report the status of proposed lateral inspection ordinances within its service area. This report may be part of the Wet Weather Improvement Plan Progress Report.	Annually, with Annual Self-Monitoring Report due February 1
6. Develop Method for Quantifying Inflow from Member Agencies. The Discharger shall develop a method for measuring or estimating inflows from member agencies.	August 1, 2013
7. Quantify Influent Flow From Member Agencies. The Discharger shall monitor, or otherwise estimate, flows from Member Agencies' collection systems to quantify the I/I attributable to each agency. This report may be part of the Wet Weather Improvement Plan Progress Report.	Annually, with Annual Self-Monitoring Report due February 1
8. Consider Flow-Based Rate Structure. The Discharger shall develop a flow-based rate structure that accounts for	August 1, 2014

Task	Compliance Date
the costs of treating and managing I/I from its member agencies (charges are currently based on equivalent-dwelling units), and present this proposal to its Board of Commissioners for consideration.	
9. Describe Status of Capital Improvement Programs of Member Agencies. The Discharger shall request information from all member agencies regarding existing and future capital improvement activities intended to reduce I/I. The Discharger shall annually report the information it receives. If, based on this information, the Discharger concludes that a member agency is not making adequate improvements to reduce I/I, the Discharger shall note this conclusion in its annual report and work with that agency to encourage performance improvement. The Discharger shall describe its efforts to encourage improvement in its reports. This report may be part of the Wet Weather Improvement Plan Progress Report.	Annually, with Annual Self-Monitoring Report due February 1
10. Prepare No Feasible Alternatives Analysis (Utility Analysis). If the Discharger seeks to continue to bypass peak wet weather flows around the secondary treatment units based on 40 CFR 122.41(m)(4)(i)(A)-(C), it shall conduct a Utility Analysis that contains all elements described in USEPA's proposed guidance *NPDES Permit Requirements for Peak Wet Weather Discharges from Publicly Owned Treatment Works Treatment Plants Serving Separate Sanitary Sewer Collection Systems* (December 2005, or the most recent version). The analysis shall account for efforts by member agencies to reduce I/I to the extent that information is available. In addressing these elements, the Utility Analysis shall specifically contain an alternatives analysis for blending reduction to evaluate strategies to further reduce blending through capital improvements. <u>The analysis shall identify all feasible alternatives and explain why infeasible alternatives are infeasible.</u> ~~The analysis will identify all options and explain why some are feasible and others are not.~~ The Discharger shall select feasible actions based on factors including, but not limited to, the need to blend (considering the effectiveness of the collection system and treatment plant improvement projects), the foreseeable impact on the need to blend, and estimated costs relative to the Discharger's ability to finance the costs. (One means to assess a community's ability to fund wet weather improvements is to consult USEPA's CSO Guidance for Financial Capability Assessment and Schedule Development, EPA Publication Number 832-B-97-004.) The Utility Analysis shall include a timeline for implementation of the feasible actions. <u>The primary purposes of the Utility Analysis are to demonstrate that there are currently no feasible alternatives to blending (i.e., all feasible actions that could have been implemented have been implemented) and to identify all feasible actions that can be implemented within the next permit reissuance cycle.</u>	With Report of Waste Discharge due July 31, 2017
11. Develop and Implement Public Notification Protocol. The Discharger shall develop and implement a public notification protocol to alert the public of any bypass, including blending. The protocol shall provide a mechanism to notify the public within 24 hours of the start of any bypass, and provide an approximate duration and volume for the incident within 48 hours of it ending. The mechanism could involve, for example, Web site posting or emailing a list of interested parties. The Discharger shall submit the protocol to the Regional Water Board.	August 1, 2013