

Proposed Major Changes to Board Order No. R2-2009-0074 Municipal Regional Stormwater Permit Tentative Order

C.2 – Municipal Operations

C.2.d – Pump Stations

- Deleted prescriptive requirements for pump station monitoring.
- Deleted all reporting requirements.

C.2.f – Corporation Yard

- Clarified the window for when annual corporation yard inspection needs to be done, between September 1st and September 30th. Based on a few corporation yard inspections performed during the permit term, we have found potential discharges and issues with the Storm Water Pollution Prevention Plans.

C.3 – New Development and Redevelopment

C.3.b – Regulated Projects

- Remove grandfathering of pre-C.3 requirements for Regulated Projects. Regulated Projects that were approved with no C.3. treatment requirements under a previous MS4 permit and that have not begun construction by the effective date of this permit shall be required to fully comply with Provision C.3.c and C.3.d. (i.e., these projects must meet the hydraulic sizing criteria with LID treatment measures).

C.3.c – Low Impact Development

- Require Permittees to collectively develop and adopt design specification for pervious pavement systems, subject to Executive Officer Approval.
- Remove the restriction to allow properly engineered and maintained biotreatment systems only after an infeasibility analysis of harvesting and use, infiltration, or evapotranspiration treatment measures.
- Allow Permittees to collectively develop and adopt revisions to the soil media minimum specifications contained in the previous permit, subject to Executive Officer Approval.

C.3.e – Alternative or In-Lieu Compliance with Provision C.3.b

- Allow offsite alternative compliance projects to be completed within three years of the end of construction of the Regulated Project without penalty.
- Explicitly require that Permittees evaluate and report on the feasibility or infeasibility of all the following prior to invoking any Special Projects LID credits:
 - 100% LID treatment onsite;
 - 100% LID treatment offsite or at a regional project;
 - Payment of in-lieu fees equivalent to 100% LID treatment; and
 - A combination of LID treatment onsite, offsite, and at a regional project, and payment of in-lieu fees, the total of which is equivalent to 100% LID treatment.
- Change density criteria for LID treatment reduction credits to specify use of gross density in all cases.

- Define floor area ratio (FAR) for purposes of determining the appropriate LID credits for density of commercial and mixed use projects.
- Allow mixed-use projects to use either the dwelling units/acre or FAR criteria to calculate LID treatment reduction credits based on density.
- Specify that all Special Projects LID treatment reduction credits will no longer be allowed after the permit term.
- Require reporting on Special Projects only once a year in Annual Report, but better define requirements for narrative discussion on feasibility or infeasibility of 100% LID (see Bullet #2 above).

C.3.g – Hydromodification Management

- Delete separate HM requirements for Contra Costa Permittees, requires submittal of updated HM information to comply with the standardized requirements, and sets a date by which projects receiving planning approvals must comply with the new requirements.
- Brings the HM requirements that were in attachments to the Previous Permit directly into the Provision and standardizes them.
- Allows the Permittees to develop and submit a new approach for meeting the Permit's hydromodification requirements, direct simulation of erosion potential, subject to the Executive Officer's approval.

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

- Require inspections of pervious pavement systems of 3000 square feet or more, stormwater treatment systems, and HM controls at time of installation instead of within 45 days of installation.
- Require regular inspections of pervious pavement systems of 3000 square feet or more at Regulated Projects and alternative compliance sites.
- Exclude private-use patios for single family homes, townhomes, or condominiums from the pervious pavement system inspection requirements above.
- For residential subdivisions with pervious pavement systems that include individual driveways, allow inspection of a representative number of driveways instead of all driveways.
- For vault-based stormwater treatment systems, allow Permittees to accept 3rd party inspection reports in lieu of conducting Permittee O&M inspections, but only if the 3rd party inspections are conducted at least annually.
- Continue to require detailed database or tabular format on O&M inspections but remove requirement for annual reporting on individual inspections conducted during the reporting period. Add requirement that detailed information from the database must be submitted upon request by Executive Officer.
- Require Enforcement Response Plan for O&M inspections.

C.3.j – Green Infrastructure Planning and Implementation

- Require each Permittee to develop a Green Infrastructure Plan that meets the minimum requirements outlined in the MRP within the permit term.
- Permittees must submit documentation of early buy-in and commitment by governing body.
- Permittees must submit annual list of potential or planned green infrastructure projects.

C.4 – Industrial and Commercial Site Controls

Entire provision reformatted to flow and read better. This includes a brand new C.4.d. – Inspections, which essentially consolidates the inspection requirements in C.4.b. – Inspection Plan and C.4.c. – Enforcement Response Plan.

C.4.b – Inspection Plan

- Deleted requirement to submit list of facilities scheduled for inspection each year. Instead, each year's list is just added to the Inspection Plan.

C.4.c – Enforcement Response Plan

- Expanded to add examples and clarifications. ERP requirements are consistent in C.4, C.5, and C.6. We reviewed over 30 ERPs. Almost all of these ERPS are for all 3 provisions and nearly all of the ERPs reviewed already comply with the changes in the draft permit.

C.4.d – Inspections

- Consolidated the inspection requirements in C.4.b. – Inspection Plan (C.4.b.ii.(4)-(5)) and C.4.c. – Enforcement Response Plan (C.4.c.ii.(4) and C.4.c.iii.).
- Deleted use of “violation” as the driver for follow-up and reporting, but required adequate follow-up for **potential** and actual discharges to ensure implementation of corrective actions in a timely manner (10 business days after discovery of potential and/or actual discharges). Some Permittees allow up to 30-days for businesses to implement corrective for potential discharges, which include housekeeping issues, evidence of actual discharges, lack of Best Management Practices (BMPs), inadequate BMPs, and inappropriate BMPs. Some of these potential discharges can lead to an actual discharge, if not corrected before the next rain event.

C.5 – Illicit Discharge Detection and Elimination

C.5.b – Enforcement Response Plan

- Expanded to add examples and clarifications. ERP requirements are consistent in C.4, C.5, and C.6. We reviewed over 30 ERPs. Almost all of these ERPS are for all 3 provisions and nearly all of the ERPs reviewed already comply with the draft changes.

C.5.c – Spill and Dumping Complaint Response Program

- To reflect the changing landscape of web usage, added requirement to specifically publicize the central contact point for reporting spills and dumping on the Permittee's website by June 30, 2016.
- Added requirement to have a response flow chart or phone tree showing Permittee's staff responsible for the spill and dumping response program.
- The provision has been reformatted to read better.

C.5.d – Control of Mobile Sources

- Expanded reporting requirements to better understand what Permittees have done to comply with the Implementation Level requirements during this current permit term and what will be done to comply next permit term. There are **no** new Implementation Level requirements in the Draft Permit. The provision has been reformatted to read better.

C.5.e – Collection System Screening

- Deleted all requirements in the draft permit.

C.6 – Construction Site Control

C.6.b – Enforcement Response Plan

- Expanded to add examples and clarifications. ERP requirements are consistent in C.4, C.5, and C.6. We reviewed over 30 ERPs. Almost all of these ERPs are for all 3 provisions and nearly all of the ERPs reviewed already comply with the draft changes.

C.6.e – Inspections

- Added “hillside projects” disturbing greater than or equal to 5,000 square feet for monthly inspection and follow-up during the wet season. Permittees can use their existing map of hillside development areas or criteria, or hillside development can be defined as $\geq 15\%$ slope. They will need to certify their method of determining hillside development in the 2016 Annual Report.

C.7 – Public Information and Outreach

C.6.e – Public Outreach and Citizen Involvement Events

- Combined back together Public Outreach and Citizen Involvement Events

C.8 - Water Quality Monitoring

C.8.a - Compliance Options

- Encourages further regional collaboration, particularly in reporting.

C.8.d - Creek Status Monitoring

Management questions remain the same, but the provision is reformatted for clarity. The changes listed below reflect what we have learned in the previous permit term and/or new monitoring protocols:

- Level of effort at bioassessment sites is increased to reflect a change in the protocol. Analytic costs stay the same; time needed to conduct the assessment increases by about 20 minutes/site.
- Most sampling frequencies for Vallejo and Fairfield-Suisun Permittees are reduced to reflect the difference in population between them and other Permittees.
- Toxicity and sediment pollutant sampling are reduced by about half (in Creek Status and Pollutants of Concern Monitoring collectively). This represents a significant cost savings. New toxicity test procedures are required to reflect changes in the protocol and to test the most sensitive aquatic species.
- The maximum number of follow up studies required is reduced from ten to eight (when done by all Permittees collaboratively), because lessons learned through the studies are to be applied across the Permit area; thus, repetition is not always necessary. Old Appendix H is eliminated; instead, the actions to take when monitoring results trigger follow up are included in the main body of Provision C.8.
- Stream Surveys are eliminated because similar information is collected through bioassessments. This represents a significant reduction in required effort.

C.8.e - Monitoring Projects

- BMP effectiveness investigations are eliminated because the requirement was redundant with Provision C.3.
- Geomorphic studies are eliminated because the information, while useful in stream restoration projects, is not directly used in managing urban runoff.

C.8.f - Pollutants of Concern (POC) Monitoring

The previous permit specified contaminants and frequencies and allowed an alternative monitoring approach if such an approach better addressed stated management questions. In this permit, C.8.f more explicitly addresses management information needs. The changes listed below reflect this approach:

- Requirements for specific monitoring locations, intensities and frequencies have been eliminated.
- Management information needs are stated in a way that is more focused on actions:
 - Where are opportunities for load reductions?
 - Which source areas contribute most to Bay impairment?
 - Provide support for planning future management actions or evaluate existing actions.
 - Assess POC loads, concentrations, or presence/absence.
 - Evaluate trends in loads or concentrations of POCs.
- Monitoring actions that address the five management information needs are defined.
- The provisions identify specific pollutants of concern and state which management information needs apply to which pollutants.
- The overall level of effort for each management information need for each pollutant is specified.
- The Permittees have flexibility in allocating monitoring effort (provided that minimum levels of effort are satisfied) toward each of the pollutants and which type of monitoring activity can best address the management information need. A requirement for an annual Pollutants of Concern Report has been added (in new Provision C.8.g).

C.8.f – Citizen Monitoring and Participation

- Eliminated. Not necessary because Provision C.8.a. allows third-party monitoring.

C.9 – Pesticides Toxicity Control

This provision has relatively few changes, which include:

- The list of pesticides of concern to water quality is updated to reflect changes in pesticide usage and current monitoring data.
- References to EcoWise Certified IPM are minimized, because this program is not in full operation to the extent Permittees could readily access it.

C.10 – Trash Load Reduction

- Several benchmarks and compliance limits included:
 - 60% trash reduction by benchmark July 1, 2016;

- 70% by July 1, 2017 – this is a regulatory compliance limit;
- 80% benchmark by July 1, 2019; and
- 100%, or no adverse impact to receiving waters from trash, by July 1, 2022.
- Accounting is map or TMA based, with trash generation areas weighted based on $VH = 100$ gal/acre/yr, $H = 30$ gal/acre/yr, $M = 7.5$ gal/acre/yr and $L = 2.5$ gal/acre/yr.
- Provision for compliance value for source control and additional creek and shoreline cleanup beyond Hot Spot cleanup requirements, with sufficient assessment and demonstration of sufficient outcome.
- Assessment is basis for all accounted credit toward trash reduction – visual assessment primary means
- Receiving water monitoring required

C.11 Mercury and C.12 PCBs

These two provisions remain similar to each other. The previous permit required pilot projects for a variety of PCBs and mercury control measures. This Permit builds on what was learned in the pilot studies. The following requirements have been removed from C.11 and C.12:

- Collection and recycling mercury containing devices
- Monitor for methyl mercury
- Pilot projects to investigate and abate sources of mercury and PCBs in drainages and stormwater conveyances
- Pilot projects to evaluate and enhance sediment removal and management practices
- Pilot projects to evaluate on-site stormwater treatment via retrofit
- Diversion of dry weather and first flush flows to POTWs
- Developing an allocation-sharing scheme with Caltrans (for mercury)

C.11 and 12 now focus on achieving load reductions to make substantial progress toward achieving TMDL load allocations for urban runoff. These provisions require an assessment framework to document these load reductions. Some requirements relate to specific sources (e.g., PCBs in caulk), but, for the most part, Permittees must determine the most efficient and effective means of achieving the required load reductions. The major elements include:

C.11/12.a Implement control measures to achieve PCBs and mercury load reductions

- Identify watersheds where controls implemented and control measures employed
- Implement sufficient PCBs controls by Year 3 to account for 0.5 kg/yr reduction
- Implement sufficient PCBs controls by end of permit to account 3 kg/yr over term of MRP 2.0
- Implement sufficient mercury controls to account for substantial and measurable progress toward achieving TMDL allocations

C.11/12.b Assess PCBs and mercury load reductions from stormwater

- Develop and implement an assessment methodology and data collection program to quantify PCBs and mercury loads reduced through implementation of all control measures.

C.11/12.c Plan and implement PCBs and mercury load reductions through Green Infrastructure implementation

- Account for 120 grams/year PCBs load reductions through GI in years 3-5
- Account for 48 grams/year mercury load reductions through GI in years 3-5
- C.11/12 contains expected performance outcomes
- Evaluate/Assess likely PCB and Hg –reduction benefits (and timing) through future GI implementation
- Provide reasonable assurance that GI infrastructure will yield load reductions

C.11/12.d Plan for MRP 3.0 and beyond to reach allocation (applies to PCBs and Hg)

TMDL says: develop a plan to fully implement control measures that will result in attainment of allocations, including an analysis of costs, efficiency of control measures and an identification of any significant environmental impacts.

- Identifies specific load reduction commitments for the next five years (MRP 3.0) and details of how these will be accomplished (watersheds, control measures, schedule)
- Contains a plan and timeline designed to attain over the long-term the aggregate, region-wide, urban runoff wasteload load allocations.

C12.e Evaluate PCBs Presence in Storm Drain or Roadway Infrastructure in Public Rights-of-Way

- Take samples of caulk in roadway and storm drain infrastructure and analyze for PCBs.
- Submit sampling plan that focuses on sampling in areas where PCB caulk most likely used based on infrastructure age

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

This is a new requirement which is expected to contribute significantly to the reduction in PCBs loads.

- In the first three years of the permit term, Permittees are required to develop a program for requiring applicants for demolition permits (for applicable structures) to control PCBs during the demolition process. Applicable structures are those built or remodeled between the years 1950 and 1980. Single-family residential and wood frame structures are excluded.
- In the final two years of the permit term, the Permittees are required to implement this program requiring the control of PCBs during demolition.

C.12.g Fate and Transport Study of PCBs: Urban Runoff Impact on San Francisco Bay Margins (may also apply to Hg, but likely also accomplished through RMP support)

This requires Permittees to collectively conduct or cause to be conducted studies aimed at better understanding the fate, transport, and biological uptake of PCBs discharged from urban runoff to San Francisco Bay margin areas.

C.11.e (C.12.h) Implement a Risk Reduction Program (applies to PCBs and Hg)

This continues from the previous permit and encourages Permittees to (1) use the risk reduction framework developed during that time, and (2) collaborate with industrial and municipal wastewater discharger agencies.

C.13 – Copper Controls

C.13 requirements are relatively unchanged. Some requirements have been scaled back or eliminated.

C.13.a – Manage Waste Generated from Cleaning and Treating of Copper Architectural Features, Including Copper Roofs, during Construction and Post-Construction

This continues essentially unchanged. Assuming the legal authority has now been established, Permittees shall continue to prohibit discharge from this activity.

C.13.b – Manage Discharges from Pools, Spas, and Fountains that Contain Copper-Based Chemicals

- Retain similar provision element from MRP 1

C.13.c – Vehicle Brake Pads

- This element has been eliminated

C.13.d – Industrial Sources

- This element has been retained essentially unchanged.

C.13.e – Studies to Reduce Copper Pollutant Impact Uncertainties

- This element has been eliminated

C.14 – City of Pacifica and San Mateo County Fecal Indicator Bacteria Controls

This new provision implements the stormwater requirements of the San Pedro Creek (Creek) and Pacifica State Beach (Beach) Bacteria TMDL, which became effective October 1, 2013. It affects two Permittees: the County of San Mateo and the City of Pacifica, to the extent they discharge to the Creek and Beach. This provision replaces the Previous Permit's Provision C.14, which included monitoring requirements for contaminants of emerging concern, including polybrominated diphenyl ethers (PBDEs), legacy pesticides, and selenium. Monitoring requirements for emerging contaminants have been incorporated into Provision C.8.

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

- Requires the County of San Mateo and City of Pacifica to implement measures to address discharges to the storm drain, including: potential illicit discharges from the sanitary sewer system; discharges from commercial horse and dog kennel facilities; and discharges of pet waste. Measures include public education, facility inspection, installation of dog waste stations, and appropriate re-focusing of measures as additional information is collected.

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

- Requires monitoring of water quality at the Creek and Beach to determine whether they are meeting the TMDL's wasteload allocations. Additionally, requires an assessment, prior to the end

of the Permit term, of needed changes, such as additional control measures, to attain the wasteload allocations.

C.14.c. – Conduct Water Quality Monitoring to Characterize Sources of Bacteria in the Project Area and to Assess BMP Effectiveness

- Requires monitoring of subwatersheds to characterize bacterial water quality, identify particular areas and sources that may be resulting in exceedances of water quality objectives, and to evaluate the effectiveness of existing control measures and needed changes, if any.

C.15 - Exempted and Conditionally Exempted Discharges

C.15.a. – Exempted Non-Stormwater Discharge (Exempted Discharges)

- Clarified that well development water pumped groundwater from drinking water aquifers is not an exempted discharge.

C.15.b.i.(2) - Pumped Groundwater, Foundation Drains, and Water from Crawl Space Pumps and Footing Drains

- Defined process on how to determine conditional exemption eligibility (some Permittees self-determine, others defer to Water Board staff).

C.15.b.iii – Potable Water System Discharges

- Deleted.

C.15.b.vii - Additional Discharge Types

- Deleted but will consider specific types presented in ROWDs (applications).

C.15.b.viii.(3) - Permit Authorization for Exempted Non-Stormwater Discharges

- Deleted.

C.16 – Discharges to Areas of Special Biological Significance

This new provision implements amendments to the Ocean Plan regarding discharges to Areas of Special Biological Significance (ASBS). It affects discharges from San Mateo County into the James V. Fitzgerald Marine Reserve ASBS. Thus, it requires the County to complete an ASBS Compliance Plan and comply with other relevant requirements. The County is working with State Water Board staff to complete its draft plan.