Appendix H - Permittee Specific Permit Modifications







DOCUMENT ORGANIZATION

Edits to the current Municipal Permit are shown in track changes (strikeout and underline) in italics. Subsequent text offers an explanation or justification for the suggested language change, if applicable.

The order is JRMP sections first followed by other general sections. This deviates from the Municipal Permit order, but does reflect the City's referred or priority as far as changes in the Municipal Permit requirements.

E.2 ILLICIT DISCHARGE DETECTION AND ELIMINATION - Page 84

Each Copermittee must, where feasible and priorities and resources allow, reduce and eliminate non-storm water discharges by implementing a program to actively detect and eliminate illicit discharges and improper disposal connections, and other sources of non-storm water into the MS4, or otherwise require the discharger to apply for and obtain a separate NPDES permit. The illicit discharge detection and elimination program must be implemented in accordance with the strategies in the Water Quality Improvement Plan described pursuant to Provision B.3.b.(1) and include, at a minimum, the following requirements:

Edits incorporate E.2.a.(7) that may be eliminated. Delete provision E.2.a.(7) that directs the Copermittee to require the discharger to apply for and obtain a separate NPDES permit. The Copermittee may refer the discharger to the San Diego Water Board, but does not have any control over and cannot mandate the discharger obtaining an NPDES permit, nor does it have control over the timeline of approval or authorization of the discharge by another agency (San Diego Water Board). Only the San Diego Water Board has the authority and control to mandate and authorize a discharge under an NPDES permit.

E.2.a Non-Storm Water Discharges - Page 84

- (1) Discharges of non-storm water to the MS4 from the following categories must be addressed as illicit discharges unless the discharge has coverage, or has been referred by the Copermittee to the San Diego Water Board for coverage, or meets the exception criteria under NPDES Permit No. CAG919003 (Order No. R9-2015-0013, as it may be amended or reissued) for discharges to surface waters within the San Diego Region:
 - (1) Uncontaminated pumped ground water;
 - (2) Discharges from foundation drains; ²³
 - (3) Water from crawl space pumps; and
 - (4) Water from footing drains. ²⁰

Deletion of footnotes 20 and 23.

(2) Discharges of non-storm water from water line flushing and water main breaks to the MS4 must be addressed as illicit discharges by the Copermittee unless the discharge has <u>been referred</u> by the Copermittee to the San Diego Water Board for coverage under NPDES Permit No.

CAG679001 (Order No. R9-2010-0003, as it may be amended or reissued) or NPDES General Permit No. CAG140001 (Order 2014-0194-DWQ, as it may be amended or reissued).

- (3) Discharges of non-storm water to the MS4 from the following categories must be addressed by the Copermittee as illicit discharges only if the Copermittee or the San Diego Water Board identifies the discharge as a source of pollutants to receiving waters:
 - (a) Diverted stream flows;
 - (b) Rising ground waters;
 - (c) Uncontaminated ground water infiltration to MS4s;
 - (d) Springs;
 - (e) Flows from riparian habitats and wetlands;
 - (f) Discharges from potable water sources;
 - (g) Discharges from foundation drains; ²⁴ and
 - (h) Discharges from footing drains. ²¹

Deletion of footnotes 21 and 24

E.2.a.(7) Each Copermittee must, where feasible and priorities and resources allow, reduce or eliminate non-storm water discharges listed under Provisions E.2.a.(1) (4) into its MS4, unless a non-storm water discharge is identified as a discharge authorized by a separate NPDES permit.

Edits to E.2 introduction incorporate the requirements in E.2.a.(7) and streamline the section.

E.2.d.(3) Investigate and Eliminate Illicit Discharges and Connections - Page 91

- (c) If the Copermittee identifies the source of the discharge as a category of non-storm water discharges in Provision E.2.a, and the discharge is in exceedance of NALs in <u>Provision C.1</u>the Water Quality Improvement Plan, then the Copermittee must determine if: (1) this is an isolated incident or set of circumstances that will be addressed through its Enforcement Response Plan pursuant to Provision E.6, or (2) the category of discharge must be addressed through the prohibition of that category of discharge as an illicit discharge pursuant to Provision E.2.a.(6).
- (d) If the Copermittee identifies the source of discharge as a category of non-storm water discharges in Provisions E.2.a.(1)-(2), the Copermittee must identify the source or discharger, refer the discharger to the San Diego Water Board for permitting, and provide the San Diego Water Board with a copy of the referral.
- **E.2.c. Field Screening.** See below for language modifications to complement recommended changes to D.2.b.

PROVISION D. MONITORING AND ASSESSMENT PROGRAM

D.2.b. Dry Weather MS4 Outfall Discharge Monitoring – Page 65

Each Copermittee must perform dry weather MS4 outfall monitoring to identify non-storm water and illicit discharges within its jurisdiction pursuant to Provision E.2.c, and to prioritize the dry weather MS4 discharges that will be investigated and eliminated pursuant to Provision E.2.d. The Copermittee may suspend dry weather MS4 outfall monitoring for an MS4 outfall if it has completed a referral of the discharge source for permitting by the San Diego Water Board under Provision E.2.a. Each Copermittee must conduct the following dry weather MS4 outfall discharge monitoring within its jurisdiction:

Alternative or complementary Permit language modification for consistency with modifications to Provision D.2.b. would be completed in Provision E.2.c.

E.2.c. Field Screening for MS4 Outfalls – Page 89

Each Copermittee must conduct field screening as dry weather MS4 outfall discharge monitoring (i.e. visual observations, field testing, and/or analytical testing) of MS4 outfalls and other portions of its MS4 within its jurisdiction to detect non-storm water and illicit discharges and connections to the MS4 in accordance with the dry weather MS4 outfall discharge monitoring requirements in Provisions D.2.a.(2) and D.2.b.(1). The Copermittee may suspend dry weather MS4 outfall monitoring for an MS4 outfall if it has completed a referral of the discharge source for permitting by the San Diego Water Board under Provision E.2.a.

The Dry Weather MS4 Outfall Discharge Monitoring requirements in Section D.2.b do not exonerate the Copermittee from the required field screening monitoring (D.2.b.(1)) and non-storm water persistent flow MS4 outfall discharge monitoring (D.2.b.(2)) when the Copermittee has completed a referral to the San Diego Water Board for a discharge identified under provision E.2.a as a non-storm water discharge that can be authorized by a separate NPDES permit (e.g., R9-2015-0013, R9-2010-0003).

The suggested language would allow a Copermittee the option to discontinue monitoring under D.2.b. for an identified, persistent discharge properly documented and referred for permitting to the San Diego Water Board. Note that a Copermittee that removes a referred discharge source or facility to the San Diego Water Board will continue to evaluate (D.2.b.(2)(a)) and monitor (D.2.b.(2)(b)-(e)) the remaining persistent sources in its inventory and prioritize them to continue investigations. The recommended language provides the Copermittee the flexibility to prioritize monitoring and allows the resources to be better applied to efforts on lesser known or categorized, or new non-storm water discharges.

The same changes may be noted in Provision E.2.c to avoid any difference in the requirements outlined in the two provisions.







Recommendation: Remove or Modify Provision E.3.b.(1)(f) (Disturbed Area Threshold for PDP Classification)

Provision E.3.b.(1)(f) of the 2013 MS4 Permit requires that any new or redevelopment project that does not meet any of the impervious surface-based criteria described in Provisions E.3.b.(1)(a) through (e) must still be classified as a PDP if it meets two conditions:

- (1) It will result in the disturbance of one or more acres, and
- (2) It is expected to generate pollutants post construction.

Since all land development projects can be expected to generate some level of pollutants post-construction, this provision is tantamount to classifying every project that disturbs at least one acre as a PDP. We support the intent to ensure of Provision E.3.b.(1)(f) to regulate projects which are below applicable impervious thresholds as PDPs when they pose significant long-term water quality or environmental impacts. However, setting thresholds to address the <u>post-construction</u> impacts of projects based on levels of temporary <u>construction phase</u> disturbance makes little sense. Impacts based on construction activity should be addressed exclusively in Provision E.4 (Construction Management). We are particularly concerned about the impact of these requirements on two project types: small homes constructed on large parcels, and routine "operational" grading conducted on existing agricultural facilities (e.g., clearing fields).

We are requesting that RWQCB staff engage with Copermittees and other stakeholders during the reissuance process to identify more appropriate and effective protections for projects below impervious area PDP thresholds, if necessary. Our preference is the removal of Provision E.3.b.(1)(f) entirely since we believe that the impervious surface thresholds of Provisions E.3.b.(1)(a) through (e) are sufficiently protective. We're also open to discussion of potential modifications that would improve the existing provision. Potential areas of improvement that might be explored include the following:

- Modify "expected to generate pollutants post construction" to set a reasonable, clear, and enforceable limit on the post-construction generation of pollutants.
- Establish design parameters that allow exemption from PDP classification by establishing appropriate controls to mitigate potential impacts. For example, any project for which all DMAs on the site are de minimis, self-mitigating, and/or fully self-retaining. While it is possible under the current Order to use enhanced site design practices to design projects that do not require structural BMPs, these projects must still be classified as PDPs. This unnecessarily increases design and review costs, and fails to incentivize a wider use of site design practices. Providing an exemption for projects meeting these design standards would address both of these issues for any project "going the extra mile" to fully utilize site design principles. Moreover, it would further incentivize the use of the site design (or "LID") practices that the MS4 Permit is intended to support. In the long-run, this would result in more projects utilizing passive design practices that are cheaper to design and construct, less prone

- to failure, and that require less post-construction maintenance and oversight than structural BMPs.
- Establish a categorical PDP exemption for single family residential projects not otherwise exceeding impervious surface-based PDP thresholds.
- Establish a categorical PDP exemption for agricultural projects that otherwise do not exceed impervious surface-based PDP thresholds.
- Either exempt agricultural activities that are operational from PDP classification or clarify that they are not included within the definition of development.

Effective Prohibition and Novel Ecosystems

Recent environmental awareness has drawn attention to a challenging conflict between the reduction of non-stormwater discharges from municipal storm drains and the management of emergent habitat that can be dependent on these types of dry weather flows.

Under Clean Water Act Section 402(p)(3)(B)(ii), NPDES Permits issued to regulate municipal discharges "shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers". The current San Diego Regional MS4 Permit, through Provision A.1.b., states "Non-storm water discharges into MS4s are to be effectively prohibited, through the implementation of Provision E.2, unless such discharges are authorized by a separate NPDES permit." Permittees in the San Diego Region, therefore, implement programs to detect and eliminate illicit discharges to their storm drain systems under Provision E.2. These programs include intensive compliance response efforts, routine field screening of storm drain outfalls, and in depth investigations to find and eliminate sources of illicit discharges. In some cases, these efforts have resulted in a decrease and/or elimination of flow at storm drain outfalls.

The challenge is that in certain receiving waters, as human influence has increased, storm drain discharges, which may be prohibited under NPDES permits, have provided water fostering the development of novel ecosystems¹ including associated habitat. Rather than being classified as "degraded" and not supporting beneficial uses, these ecosystems may in fact be entirely different than those that previously existed and fall under the jurisdiction of state and federal agencies charged with habitat, species, and wetland/waters resource protection. (Morse, et al., 2014)

The concept of novel ecosystems warrants consideration and may be a reason to shift the way regulators and the regulated community address non-stormwater discharges. In cases where the ecological benefits of non-stormwater discharges outweigh suspected negative impacts, or where it has been demonstrated that these discharges are not negatively affecting water quality in receiving waters, there could be consideration within the context of the "effective prohibition" to allow certain flows to continue. That said, the County realizes this is a complex issue, both from an environmental standpoint and from a regulatory standpoint, and is introducing this information with the hope of initiating a dialogue with the Regional Board, wildlife and resource agencies, and the environmental community.

Morse, N. B., P. A. Pellisier, E. N. Cianciola, R. L. Brereton, M. M. Sullivan, N. K. Shonka, T. B. Wheeler, and W. H. McDowell. 2014. Novel ecosystems in the Anthropocene: a revision of the novel ecosystem concept for pragmatic applications. *Ecology and Society* **19**(2): 12. http://dx.doi.org/10.5751/ES-06192-190212

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¹ A novel ecosystem is a unique assemblage of biota and environmental conditions that is the direct result of intentional or unintentional alteration by humans, i.e., human agency, sufficient to cross an ecological threshold that facilities a new ecosystem trajectory and inhibits its return to a previous trajectory regardless of additional human intervention. The resulting ecosystem must also be self-sustaining in terms of species composition, structure, biogeochemistry, and ecosystem services. A defining characteristic of a novel ecosystem is a change in species composition relative to ecosystems present in the same biome prior to crossing a threshold.







D.1.c.(4)(a)

Additional <u>and/or alternative</u> test species may be used by the Copermittees if approved by the San Diego Water Board Executive Officer. <u>Except for the use of alternative test species as approved by the San Diego Water Board Executive Officer</u>, the Copermittees must conduct.....

Rationale

Allow Permittees to Substitute Permit Prescribed Toxicity Test Organisms With Equivalent/Alternative Test Organisms.

Provision D.1.c.(4)(a) of the Permit states that "Additional test species may be used by the Copermittees if approved by the San Diego Water Board Executive Officer. The Copermittees must conduct:

(ii) A static renewal toxicity test with the daphnid, Ceriodaphnia dubia (Survival and Reproduction Test Method 1002.0)...."

The Permittees have concerns regarding *C. dubia* survival and reproduction toxicity testing. In summary, two rounds of studies funded by the Southern California Stormwater Monitoring Coalition (SMC) and coordinated by the Southern California Coastal Water Research Project (SCCWRP) found poor inter-laboratory and intra-laboratory comparability with *C. dubia* toxicity testing, and identified toxicity in samples prepared as nontoxic blind samples and relative low comparability of laboratories between testing events. The reliability of *C. dubia* survival and reproduction toxicity testing is in question, thus future testing based on an alternative and equivalent organism is desired. Allowing for the *substitution* of *C. dubia* with alternative and equivalent test organisms, rather than simply incorporating additional test organisms would support Permittee compliance, the collection of reliable water quality data, and efficient use of limited resources. As such, the Permittees are requesting permit language modifications in Provision E.3.b.(3)(b) as noted above.

