
Santa Ana Regional Water Quality Control Board

May 1, 2024

STAFF REPORT SUMMARY

SUBJECT: Summary of the Fact Sheet and Draft National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges of Pollutants in Runoff from the Municipal Separate Storm Sewer Systems Within the Santa Ana Region, Tentative Order R8-2024-0001, Counties of Orange, Riverside, and San Bernardino

DRAFT REGIONAL MS4 PERMIT SECTION-BY-SECTION DESCRIPTION

General:

The Regional Municipal Separate Storm Sewer System Permit (Regional MS4 Permit or Permit) will be issued by the California Regional Water Quality Control Board, Santa Ana Region. The draft Regional MS4 Permit and Fact Sheet have been made available for public comment beginning on March 5, 2024 and ending on July 3, 2024. The draft Permit describes the requirements for reducing pollutants in stormwater runoff from MS4s in portions of Orange, Riverside, and San Bernardino counties that are within the Santa Ana Region. The draft Permit covers administrative details, the responsibilities of permittees, discharge prohibitions including non-stormwater (such as irrigation run-off water, car washing, and dirty water) and trash, and specific requirements for managing new developments to minimize impacts from pollution and changes in hydrology. It also includes provisions for detecting and eliminating illicit discharges, public education initiatives, and training programs to ensure compliance. The Permit aims to protect water quality by setting out pollution control and monitoring requirements and ensuring that stormwater management practices reduce pollutants to the maximum extent practicable and attain water quality objectives and waste load allocations established in the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan).

The staff report summary does not act as an amending language to the draft Regional MS4 Permit or the Fact Sheet. The staff report summary assists to provide the general public with easy-to-understand key points from each section of the draft Regional MS4 Permit and Fact sheet. The staff report summary may not contain all the regulatory details and is not a substitute for a full reading of the draft Regional MS4 Permit and Fact Sheet.

Section I: Administrative Information

The section outlines the organizational and regulatory framework under which the stormwater management permit operates. It lists the specific counties and cities in California (Orange, Riverside, and San Bernardino Counties and the cities within their jurisdictions) that are responsible for adhering to the permit requirements and indicates the Regional MS4 Permit's date of adoption, its effective date, and expiration date. It outlines the basic structure for administering the Regional MS4 Permit among the Principal Permittees and other Permittees.

Section II: Findings

The section discusses the reasons and evidence supporting the need for the regulations outlined in the permit. It outlines the negative impacts of stormwater runoff, such as pollution and changes to natural water flow, that can harm rivers, lakes, and other water bodies. This section emphasizes how the discharge of pollutants from urban and developed areas can degrade water quality and harm both the environment and human health. By identifying these issues, the Permit, in combination with the Fact Sheet, justifies the management practices and pollution controls that are required to address and mitigate these impacts effectively.

Section III: Permittee Responsibilities

The section outlines the general duties and obligations that cities and counties must fulfill under the stormwater management permit. These responsibilities include managing their stormwater systems effectively to prevent pollution, documenting their efforts, ensuring legal compliance, and engaging in cooperative measures with other jurisdictions when necessary. The section emphasizes the need for these permittees to have proper legal authority to enforce these measures and mandates them to notify relevant authorities about any issues or changes in their stormwater management practices. It outlines what the designated local governments must do to keep their waterways clean and comply with the Permit's requirements.

Section IV: Discharge Prohibitions

The section specifies the types of non-stormwater discharges that are not allowed to enter storm drains or natural bodies of water. It mainly focuses on prohibiting certain categories of non-stormwater discharges, which are typically not caused by rain or snowmelt, and could potentially introduce pollutants into the environment. The section outlines various common non-stormwater sources like condensation from air conditioners and water from building foundations, specifying which are acceptable and under what conditions. This ensures that only clean, uncontaminated water enters the stormwater systems, helping to protect local water quality and prevent pollution.

Section V: Trash Control

This section outlines strategies and regulations that the designated cities and counties must follow to prevent trash from contaminating stormwater runoff. Trash is defined as “all improperly discarded solid material from any production, manufacturing, or processing operations, including, but not limited to, products, product packaging, or containers.” Trash can be as small as plastic straws, waste wrappers, plastic bags, and large tires and mattresses. It specifies the need for implementing effective measures to capture trash before it enters waterways, using systems designed to trap particles 5 millimeters in diameter and greater. The section mandates specific actions and devices to ensure that trash does not contribute to pollution in stormwater systems.

Section VI: Receiving Water Limitations

The section lays out the restrictions placed on the quality of water that can be discharged into natural bodies of water like rivers, lakes, and oceans from stormwater systems. These limitations are designed to ensure that the stormwater discharges do not harm the water quality or disrupt the ecosystem. The rules specify that the discharge must not cause or contribute to pollution levels that exceed established water quality standards, thereby protecting aquatic life and ensuring that the water remains safe and clean for various uses, including recreation and wildlife habitat.

Section VII: Effluent Limitations and Discharge Specifications

This section requires the Permittees to reduce pollution in stormwater discharges to the maximum extent practicable according to the Regional MS4 Permit’s requirements. The Permit also establishes the water quality-based effluent limitations (or WQBELs for abbreviation). WQBELs specifically limit pollutants in the water, based on the unique needs of each water body receiving the stormwater. These limits are detailed in Appendices 2 through 13 and are designed to meet the waste load allocations established in the Basin Plan by "Total Maximum Daily Loads" (TMDLs). Waste load allocations are like pollution budgets for water bodies. They tell the Permittees how much of a particular pollutant can be safely discharged into a specific water body without harming the water quality. By setting specific limitations and requirements, the Permit details specific scenarios and pollutants, like the amount of nitrogen that can be released into certain water bodies during different times of the year (wet season vs. dry season).

Section VIII: New Development (Significant Redevelopment)

This section focuses on the requirements and guidelines for managing stormwater in new construction projects and major redevelopment efforts. It emphasizes the need for integrating stormwater management features to prevent pollution from entering local water bodies. The section outlines planning requirements, specifies which projects are subject to the section’s requirements, and describes the general and

specific requirements for implementing effective stormwater controls, such as using systems that capture and treat runoff before it can harm the environment.

Section IX: Illicit Discharge Detection and Elimination Program

The "Illicit Discharge Detection and Elimination Program (IDDE)" outlines a strategy to find and stop improper or illegal discharges into storm drainage systems. This program targets discharges that are not from stormwater—like sewage, chemicals, or industrial waste—which can seriously harm water quality. The section details methods for monitoring, reporting, and eliminating these illicit discharges by training staff, inspecting sites, and enforcing regulations. It sets up a system to ensure that only rainwater enters the storm drains, helping to keep our rivers, lakes, and oceans clean.

Section X: Public Education and Outreach

This section requires the development of strategies for informing and engaging the public about the importance of preventing pollution. It emphasizes the need for cities and counties to conduct educational campaigns and outreach programs. These initiatives are designed to teach community members about the impact of stormwater pollution on the environment and public health, and to encourage behaviors that reduce pollution. The goal is to increase awareness and active participation among residents and businesses in keeping local waterways clean.

Section XI: Training Programs

The section lays out the requirements for educating and training Permittees' staff who are involved in stormwater management. This includes training for inspectors, planners, maintenance personnel, certain contractors and vendors, and others. Training includes learning about the best practices for performing inspections, preventing contaminants from entering waterways through storm drains, detecting, reporting and/or responding to illicit discharges, and performing other duties to comply with the Regional MS4 Permit. The training aims to ensure that those responsible for stormwater systems are well-equipped with the necessary knowledge and skills to implement effective pollution control measures and comply with the Permit.

Section XII: Watershed Management Plans

This section establishes requirements for Watershed Management Plans that cities and counties may choose to implement to manage and protect water resources on a watershed-scale. The Plans are not mandatory but serve as an alternative to complying with receiving water limitations or WQBELs whose deadlines have not yet passed. The Plans must provide a reasonable assurance that receiving water limitations and WQBELs will be attained by a specific deadline. These Plans set out detailed goals and measures such as monitoring water quality, restoring natural

habitats, and reducing pollutants. The Plans are subject to public review and must be approved by the Executive Officer.

Section XIII: Municipal Inspections

This section requires local governments to regularly inspect construction, industrial, and commercial sites within their jurisdictions to ensure they are not contributing to stormwater pollution. The goal of these inspections is to ensure that all activities at these sites are carried out in a way that protects water quality, and if any issues are found, the local authorities must take steps to address them and ensure compliance with environmental standards.

Section XIV: Municipal Facilities/Activities

Cities and counties must manage their own facilities and activities to prevent pollution in stormwater. This section explains the rules and responsibilities for managing fixed facilities that they own or control, such as public buildings, parks, golf courses, boat yards, and other municipal properties such as streets, to ensure they do not contribute harmful substances to the water system. This includes ensuring that activities like maintaining vehicles, roadways, or managing waste are done in ways that keep pollutants out of storm drains.

Section XV: Program Effectiveness Assessment

The section focuses on evaluating how well the stormwater management programs are working. It describes the methods and metrics that cities and counties must use to measure their success in reducing pollutants in stormwater runoff. This includes tracking progress, assessing the effectiveness of various management practices, and adjusting if goals aren't being met. Cities and Counties must show that the efforts to protect water quality are making a difference and require continuous improvement of the stormwater management strategies to comply with receiving water limitations and WQBELs.

Section XVI: Monitoring and Reporting Program

This section describes the requirements for cities and counties to track and report on the quality of water in their areas. This program ensures that they regularly check water for pollutants and effectively manage stormwater runoff to prevent pollution. Cities and counties must submit detailed reports on their findings, which will help determine if their efforts to control pollution are working.

Section XVII: Standard Provisions

This section serves as a baseline for what is expected of parties subject to National Pollutant Discharge Elimination System (NPDES) permits. The requirements of this section come from federal regulations. Some of those include elements of permit compliance (e.g., the duty to comply and mitigate, inspection and entry, bypass or

upset in the treatment control system), monitoring, record keeping, reporting, and enforcement, providing a framework for consistent application of the permit's regulations across different municipalities and agencies involved in stormwater management.

Section XVIII: Reopener and Permit Modification

The section explains that the rules and regulations outlined in the Regional MS4 Permit can be updated or changed if new information becomes available or if conditions change. This means that the Permit can be adjusted to include new scientific data or to reflect changes in environmental conditions or technology. This flexibility ensures that the Permit remains effective in protecting water quality and can adapt to new challenges or improvements in stormwater management practices.

Summary of the Fact Sheet to the Draft Regional MS4 Permit

General:

The Fact Sheet to the Draft Regional MS4 Permit (Fact Sheet) outlines the basis and rationale for requirements for managing discharges of pollutants in runoff in the Santa Ana Region, which includes parts of Orange, Riverside, and San Bernardino counties. Sometimes called a Technical Report, the Fact Sheet explains the focus on reducing pollutants in stormwater to protect water quality and comply with the requirements of the Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) permit requirements. Key elements include discharge prohibitions, guidelines for new developments, trash control provisions, and public education initiatives. The permit also mandates regular monitoring and reporting by municipal entities and involves public participation in environmental protection efforts. The goal is to maintain water quality standards and ensure responsible stormwater management across the region.

Regional MS4 Permit Fact Sheet Section-By-Section Description

Section I: Purpose

The section outlines the foundational reasons and legal considerations behind issuing the Regional MS4 Permit. This Permit is part of a comprehensive approach under the federal National Pollutant Discharge Elimination System (NPDES) to manage and reduce pollutants in stormwater runoff from municipal systems across the parts of counties of Orange, Riverside, and San Bernardino that are within the Santa Ana Region. The section serves to summarize key facts, methodologies, and significant legal and policy matters considered by the Santa Ana Water Board in crafting the Permit. It is designed as a technical report to support the permit's provisions, ensuring alignment with federal and state regulations, policies, and water quality control plans to protect water quality.

Section II: Permit Information

This section discusses who the Permit applies to, what it allows, and under what conditions. It specifies that certain municipalities, identified as Permittees, are allowed to discharge pollutants into stormwater under this permit, provided that they follow the requirements to minimize pollution and comply with receiving water limitations and WQBELs. The Permittees include all municipalities within the Santa Ana Region across Orange, Riverside, and San Bernardino counties. The section provides details on the scope of the Permit, explaining that it covers both stormwater and non-stormwater discharges from municipal separate storm sewer systems (MS4s) to waters of the U.S., aiming to control pollution to the maximum extent practicable.

Section III: Facility Description

The section of the document provides an in-depth look at the geographical and hydrological characteristics of the Santa Ana Region, which includes parts of Orange, Riverside, and San Bernardino counties. This section details the natural water flow patterns, the impact of urbanization on these patterns, and the region's dependency on both natural and managed water systems to meet its water needs. It discusses how water from rain, rivers, and recycled sources is managed and outlines the types of infrastructure, such as storm drains and sewers, that are used to control and distribute water. This helps in understanding how water is handled in the region to prevent flooding and pollution, ensuring sustainable water usage and protection of the environment.

Section IV: Applicable Statutes, Regulations, Plans, and Policies

The section details various laws and policies that govern the management of stormwater discharges in California under the MS4 permit. This includes major laws like the Clean Water Act and California's own Porter-Cologne Water Quality Control Act. It mentions the responsibilities that cities and counties have under these laws and regulations to manage stormwater and prevent pollution. The section also explains how the Regional MS4 Permit implements statutes, regulations, plans and policies to help in maintaining the quality of water by setting limits on pollutants and ensuring that new developments or significant changes to land use consider the impact on water systems.

Section V: Rationale for Permittee Responsibilities

The section explains why the designated counties and cities in the Santa Ana Region are responsible for complying with the stormwater management permit. This section discusses the legal and enforcement mechanisms that these permittees must follow to ensure they control pollution in stormwater effectively. It details the need for these entities to have the proper authority to enforce regulations and the importance of their commitment to maintaining public health and environmental standards by preventing polluted runoff from affecting water bodies. This ensures that local governments are equipped and obliged to manage stormwater in ways that protect water quality and comply with broader environmental regulations.

Section VI: Rationale for Discharge Prohibitions

The section outlines the reasons for requirements on what can and cannot be discharged into stormwater systems, based on federal regulations. It discusses the importance of preventing non-stormwater discharges, which can introduce pollutants into water systems, adversely affecting water quality and harming aquatic ecosystems and human health. The section also covers the prohibition of trash in discharges, based on state-wide water quality control plans, which is crucial to prevent physical pollution that can clog waterways, pose hazards to wildlife, and degrade the aesthetic and recreational value of water bodies. This section is

designed to ensure that only stormwater and authorized non-stormwater discharges enter the storm sewer systems.

Section VII: Rationale for Trash Control Provisions

This section outlines the reasons for control measures for trash in stormwater runoff. It explains the need to prevent trash from entering water bodies, based on state-wide water quality control plans, as it poses significant risks to water quality and aquatic life. The section justifies the implementation of specific rules to reduce the amount of trash entering the stormwater systems, aiming to meet environmental standards and protect natural habitats.

Section VIII: Rationale for Receiving Water Limitations

The section explains the reasoning behind setting specific limitations on the discharge of pollutants into water bodies receiving stormwater runoff. It emphasizes the need to maintain water quality to protect both the environment and public health. The rationale is based on a series of precedential orders issued by the State Water Resources Control Board. The document outlines how these orders help ensure that the discharge does not degrade the quality of the receiving waters, adhering to both state and federal environmental standards.

Section IX: Rationale for Effluent Limitations and Discharge Specifications

This section explains why there are specific limits and requirements on pollutants that can be discharged into water bodies. This section outlines both technology-based and water quality-based effluent limitations. Technology-based limitations are based on the performance of treatment and control technologies that are economically achievable and capable of reducing pollutant discharges. Water quality-based limitations may be narrative (e.g. requirements for certain pollution controls) or numeric effluent limitations. Both are designed to ensure that water bodies meet the quality standards necessary to support their ecological and human uses by controlling the amount and type of pollutants discharged to specific water bodies and are provided in Appendices 2 through 13.

Section X: Rationale for New Development (Including Significant Redevelopment) Provisions

The section explains the reasons and logic behind the regulations for managing stormwater in new constructions and major renovations within the specified counties. These projects are called priority projects. This includes setting up controls to manage stormwater effectively to prevent pollution and environmental damage and documenting the controls in project Water Quality Management Plans. The section underscores the importance of integrating water quality management into the planning and development process, ensuring that new developments contribute to sustainable water management practices and comply with established environmental standards. The section describes strategies for incorporating

treatment controls at larger scales and how the Regional MS4 Permit minimizes conflicts with those strategies. The goal is to minimize the impact of urban expansion on water bodies and maintain high-quality water standards by requiring appropriate stormwater treatment and management measures in new priority projects consistent with federal regulations.

Section XI: Rationale for Illicit Discharge Detection and Elimination Program

The program outlines the necessity and reasoning behind implementing strategies to detect and eliminate illegal discharges into stormwater systems. This program is based on federal regulations and is essential to ensure that only rainwater and other specifically allowed categories of non-stormwater discharges enter these systems, preventing pollutants like chemicals or waste from homes and industries from contaminating water bodies.

Section XII: Rationale for Public Education and Outreach Provisions

This section explains the importance of educating the public and conducting outreach activities as part of stormwater management. It highlights the necessity of involving the community in understanding and participating in efforts to reduce pollution in stormwater. This approach aims to enhance public awareness and compliance with practices that protect water quality, ultimately leading to more effective management of stormwater and reduced environmental impacts. This section justifies the need for continued public engagement and educational programs, based on federal regulations, to foster a collaborative effort between the community and the Permittees to ensure cleaner water bodies.

Section XIII: Rationale for Training Programs

The section underscores the importance of training municipal staff and contractors involved in activities that could impact stormwater quality and implementing programs to comply with the Regional MS4 Permit. This section explains that such training ensures that these personnel are well-informed about the best practices for pollution prevention and are aware of the regulatory requirements they must meet. The rationale highlights the direct link between well-trained personnel and the effectiveness of stormwater management programs in reducing pollutants in runoff.

Section XIV: Rationale for Watershed Management Plans

The section explains the requirements for Watershed Management Plans that may be used by groups of Permittees to manage entire watersheds effectively. It discusses the importance of these plans in integrating various environmental, community, and regulatory goals across multiple jurisdictions that share the same water resources. It also explains how Watershed Management Plans can be used to comply with Receiving Water Limitations and to attain WQBELs where the deadline has not yet passed or where there is no deadline. It discusses how these Plans are based on a precedential order issued by the State Water Resource Control Board.

Section XV: Rationale for Municipal Inspections of Construction, Industrial, and Commercial Sites

This section outlines the responsibilities and processes involved in conducting inspections at various sites to ensure compliance with stormwater management and pollution prevention regulations. This section emphasizes the need for municipalities to regularly inspect construction, industrial, and commercial sites to monitor and enforce the implementation of best management practices (BMPs) that prevent pollution from entering stormwater systems based on federal regulations. These inspections are crucial for maintaining water quality and ensuring that these sites operate within the environmental guidelines established to protect local waterways from pollution.

Section XVI: Rationale for Municipal Facilities/Activities Provisions

The section discusses the reasons for establishing specific requirements for activities and facilities operated by municipalities. These requirements are based on federal regulations and ensure that municipal operations, which include public buildings, parks, and other community services, do not contribute to stormwater pollution. The rationale emphasizes the need for cities and counties to implement best management practices and controls to minimize the release of pollutants from municipal facilities into the stormwater system.

Section XVII: Rationale for Program Effectiveness Assessments Provisions

The section explains the Regional MS4 Permit's requirements to regularly evaluate how well the stormwater management programs are working. This involves checking whether the activities and measures put in place to prevent water pollution are effective based on performance metrics and appropriate methods of measuring their attainment. The section highlights the need for these assessments to ensure that the programs are achieving their goals, which include reducing pollutants in stormwater to protect water quality. This ongoing evaluation helps in making necessary adjustments to the programs, ensuring they are continually improved to meet water quality objectives and comply with WQBELs.

Section XVIII: Rationale for Monitoring and Reporting Program

This section outlines the responsibilities and processes involved in monitoring program activities and the quality of discharges from the Permittees' storm drain outfalls and receiving water bodies as they relate to water quality objectives and WQBELs. The requirements are based on the Clean Water Act and the federal regulations. This section describes the reasons for allowing the Permittees to utilize monitoring work performed by or in coordination with other parties to improve the quality of their monitoring program. It also explains the reasoning for reducing the level of prescriptiveness of the requirements and focusing on achieving the goals of the monitoring program.

Section XIX: Rationale for Standard Provisions

This section explains that Standard Provisions are applicable to all NPDES permits, and additional conditions apply to MS4 permits according to federal regulations.

Section XX: Rationale for Reopener and Permit Modification

The section explains that the Santa Ana Water Board may reopen the Regional MS4 Permit for certain reasons and revoke, reissue, or terminate it according to federal regulations. This ensures the Permit remains relevant and effective in addressing new environmental challenges or incorporating advancements in stormwater management practices.

Section XXI: Water Code Section 13241

The section discusses certain factors that the Santa Ana Water Board has considered as it works to maintain and improve water quality. This section covers how water quality decisions consider various factors, such as the historical, current, and probable future uses of the water, the environmental characteristics of the area, and the economic impacts of water quality controls. It emphasizes that these decisions should ensure water quality is sufficient to protect both the environment and public health, while considering the economic feasibility and the need for housing and recycled water development in the region. This approach helps balance environmental protection with social and economic needs.

Section XXII: State Mandates

The section includes a discussion of mandates law based on statutory and case law at the time. It explains that local governments are authorized to fund their compliance with the permit requirements through service charges, fees, or assessments. Additionally, it clarifies that the new or modified permit requirements do not mandate new programs or higher levels of service beyond what is already required. This section emphasizes that these permit requirements are considered non-reimbursable federal mandates, meaning they are obligations that must be met without federal reimbursement.

Section XXIII: Public Participation and Notification

The section summarizes the efforts made to engage the public in the regulatory process and keep them informed about changes and updates to the Regional MS4 Permit. It emphasizes the importance of public input and transparency, outlining the procedures for public notifications, the period for public comment, and how public meetings were conducted up to the adoption of the Permit.