

INFORMATIONAL DOCUMENT

Public Scoping Meeting

**PROPOSED AMENDMENTS TO THE WATER QUALITY CONTROL
PLAN FOR OCEAN WATERS OF CALIFORNIA AND PROPOSED
PROVISIONS OF THE WATER QUALITY CONTROL PLAN FOR INLAND
SURFACE WATERS, ENCLOSED BAYS, AND ESTUARIES OF
CALIFORNIA**

**FOR THE CONTROL OF PESTICIDE DISCHARGES FROM
MUNICIPAL SEPARATE STORM SEWERS**

January 2017

**DIVISION OF WATER QUALITY
STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**

Summary:

This informational document describes options proposed by the State Water Resources Control Board (State Water Board) to develop a Statewide Plan for reduction of pesticides in urban storm water and summarizes factors that could be considered in the analysis of potential significant environmental effects under the California Environmental Quality Act (CEQA). The Strategy to Optimize Resource Management of Storm Water (Storm Water Strategy), adopted by the State Water Board in January 2016, aims to lead the evolution of storm water management in California by advancing the perspective that storm water runoff is a valuable resource, supporting policies for collaborative watershed-level storm water management and pollution prevention, and integrating regulatory and non-regulatory interests. Under Objective 6 of the Storm Water Strategy (Increase source control and pollution prevention), the State Water Board is developing Amendments to the Water Quality Control Plans for Inland Surface Waters, Enclosed Bays, and Estuaries of California and the Ocean Plan for the control of pesticide discharges from municipal separate storm sewers (Urban Pesticides Amendments). This project will employ a multi-agency approach calling on participation from the State Water Board and Regional Water Quality Control Boards (Regional Water Boards), municipalities, and state and federal pesticide regulators.

This document is provided to the public for the purposes of receiving input on the scope of the State Water Board's CEQA analysis. State Water Board staff will host two scoping meetings to assist in identifying the issues relevant to stakeholders during the environmental review process (Cal. Code Regs., tit. 23, § 3775.5). This document is not intended to fulfill the State Water Board's formal planning requirements under the Porter Cologne Water Quality Control Act, the Federal Clean Water Act, or CEQA. A Draft Staff Report, including substitute environmental documentation, and draft water quality control plan amendments will be prepared and circulated at a later date to fulfill the State Water Board's formal water quality planning obligations.

Environmental Background:

California's urban receiving waters face water quality problems due to past and current use pesticides. Pesticides applied in urban areas may wash off and be discharged via storm drains into receiving waters during storm events, or as dry weather runoff (e.g. excess runoff from landscape irrigation). Runoff from impervious surfaces is considered the greatest contribution to receiving water toxicity in urban environments (Moran and TenBrook 2011).

In the 1990s, environmental monitoring revealed widespread presence of the organophosphorous pesticides diazinon and chlorpyrifos and toxicity due to these pesticides in California urban waterways (Bailey et al. 2000, Hunt et al. 2003). Both diazinon and chlorpyrifos were phased out for urban residential uses nationwide in the early 2000's, and declines of both have been documented in several water bodies throughout the state in the State Water Board's annual performance reports (EPA 2000, State Water Board 2015). In their place, pyrethroid pesticides increased in use following the phase-out of residential-use diazinon and chlorpyrifos (Ensminger and Kelly 2011(1), Ruby 2013).

Department of Pesticide Regulation (DPR) monitoring in Southern California urban watersheds in 2014-2015 found widespread prevalence of pyrethroids and several other current-use pesticides (e.g. fipronil), often at levels that could cause aquatic toxicity (Budd 2016). DPR monitoring in Northern

California urban areas during 2014-2015 also identified pervasive pesticides of concern, including multiple pyrethroids, and often at levels that could cause aquatic toxicity (Ensminger 2016).

Regulatory Background:

The State Water Board and Regional Water Boards are delegated the responsibility for implementing California's Porter-Cologne Water Quality Control Act and the federal Clean Water Act. Sections 13140 and 13170 of the Porter-Cologne Water Quality Control Act authorize the State Water Board to adopt statewide water quality control policies and plans. In addition, section 13240 requires each Regional Water Board to formulate and adopt water quality control plans, or Basin Plans, for all areas within the Region. Each Basin Plan and statewide plan contains beneficial uses, water quality objectives to protect those beneficial uses, and a program of implementation for achieving the water quality objectives.

California is further authorized by U.S. Environmental Protection Agency (U.S. EPA) to administer sections of the Clean Water Act, including section 303(d), which requires the State and Regional Water Boards to identify water bodies and pollutants that exceed water quality objectives on California's 303(d) list of impaired water bodies, contained in the state's Integrated Report and available online. The water bodies on the 303(d) list must be addressed by a TMDL or an alternative regulatory action (40 C.F.R. §130.7(b)(1)). The 303(d) list of impaired water bodies lists more than 100 water bodies as impaired due to pesticides with urban runoff attributed as the potential source.

California is also authorized by U.S. EPA to administer National Pollutant Discharge Elimination System (NPDES) permits in accordance with CWA section 402(p) for discharges from municipal separate storm sewer systems (MS4s). These NPDES permits have a requirement that discharges shall not cause or contribute to exceedances of water quality objectives.

Project Necessity:

The need for the Urban Pesticide Amendments stems from the continued presence of pesticides and pesticide-related toxicity in urban receiving waters at levels that are causing impairments of beneficial uses. Water Board action is needed to address pesticide-related toxicity impairments in urban water bodies. In addition, the approach in the amendments could address future impairments, if they occur, rather than having to establish additional TMDLs or implementation plans. The Regional Water Boards are investing significant resources to develop total maximum daily loads (TMDLs) and permit requirements to address urban pesticides. A statewide approach would more efficiently address pesticides in urban areas of California, which generally have similar uses, runoff patterns, and potential controls. Establishing the statewide Urban Pesticides Amendments would be the most efficient way to achieve this.

Project History:

Development of the Urban Pesticide Amendments was identified as a Phase I priority in the January 2016 Storm Water Strategy. In March of 2016, a team of internal and external experts was convened to prepare background work products that will be used in the development of the amendments. The team of experts included representatives from the State Water Board, the San Francisco Bay and Central Valley Regional Water Boards, U.S. EPA Region 9, DPR, and municipality representatives from the California Stormwater Quality Association (CASQA).

Project Description:

The proposed project is to amend the Water Quality Control Plans for Inland Surface Waters, Enclosed Bays, and Estuaries of California and the Ocean Plan to establish a program of implementation for pesticide and pesticide-related toxicity water quality objectives. The program of implementation may be an alternative to TMDLs to address pesticide and pesticide-related toxicity impairments in individual water bodies. The Urban Pesticides Amendments would recognize or establish primary mechanisms for addressing pesticide-caused water quality impairments in urban receiving waters such as the role of the Water Board and MS4s in promoting source control and management of pesticide discharges in urban areas, in conjunction with pesticides use and management through federal and state pesticide regulatory authorities. The scope of the Amendments is limited to urban pesticide discharges (not pesticide discharges from agriculture), and the Amendments would only account for and apply to pesticide discharges from MS4s, not from publicly owned treatment works.

As envisioned, the Urban Pesticides Amendments would include an emphasis on integrated pest management (IPM) as the first front to prevent and correct urban pesticide water quality impairment, and would include the following three elements:

Element 1: Coordination framework for working with U.S. EPA Office of Pesticide Programs (U.S. EPA OPP) and the DPR to reduce and prevent pesticide pollution in urban receiving waters through use of their regulatory authorities.

The framework would list actions the Water Board requests of U.S. EPA OPP and DPR to continue and further improve the pesticide registration process and regulatory responses to account for water quality concerns, including promotion of IPM.

Element 2: Minimum pesticides source control measures for MS4 dischargers.

The Amendments may specify implementation requirements that would be incorporated into MS4 NPDES permits for MS4 dischargers to manage their controllable causes and contributions to current and potential exceedances of pesticide water quality objectives or pesticide-caused exceedances of narrative toxicity water quality objectives. The implementation requirements could include the following elements for MS4s:

- Limit and manage their own use of pesticides by implementing IPM programs.
- Influence the discharge of pesticides into MS4 drainage areas through education outreach programs targeted at residential and business pesticide users and those who hire structural pest control and landscape professionals.
- Encourage participation in the pesticide regulatory process through outreach to U.S. EPA and DPR on their actions that may affect urban water quality. This would include submitting comments, either individually or through a coordinated regional or statewide effort, on pending pesticide registration decisions and submitting relevant information when necessary (such as monitoring data).
- Limit dry weather runoff, including excess irrigation water, to the maximum extent practicable.
- Conduct pesticide monitoring, with an option to comply through participation in a coordinated statewide urban pesticide monitoring program (described in Element 3).

One issue for consideration may be whether permittees fully implementing these minimum pesticide control measures should be deemed in compliance during the term of the permit with receiving water

limitations with regard to the contribution of the identified pesticides to any exceedances. If this approach is taken, an additional issue for consideration may be the appropriate analysis that should be required to demonstrate that the minimum source control measures are expected to lead to compliance with receiving water limitations.

Element 3: Monitoring coordination framework for pesticides and toxicity monitoring in urban runoff and receiving waters between the Water Boards, DPR, and MS4s.

The amendment would establish a framework to track the effectiveness of the program of implementation through the coordination and improvement of existing pesticide and toxicity monitoring efforts to improve monitoring efficiency, data quality, and use of data to inform management decisions. The monitoring framework would include a set of collective goals for question-driven monitoring, to provide the foundation for a coordinated statewide monitoring program that meets the needs of the Water Boards, DPR, and permitted MS4s.

Project Goals:

The project has the following three goals:

1. Achieve water quality objectives for pesticides and toxicity in urban receiving water and prevent or readily address future water quality impairments through implementation of a statewide program for urban pesticides source control, acting as an alternative to TMDL development to address pesticide and pesticide-related toxicity impairments in individual water bodies.
2. Establish consistent statewide requirements for MS4 dischargers to manage their causes and contributions to pesticide and pesticide-related toxicity impairments.
3. Create a comprehensive, coordinated statewide monitoring framework for pesticides and toxicity in urban runoff and receiving water that improves resource efficiency, usefulness of data, and coordination of data collection to support management decisions.

Analysis of Environmental Impacts:

In accordance with CEQA, the State Water Board must present an analysis of the reasonably foreseeable methods of compliance with this project (Cal. Code Regs., tit. 23 § 3777). After receiving comments on this CEQA scoping document, the State Water Board will prepare substitute environmental documentation including a draft staff report, CEQA checklist and a draft amendment to the Inland Surface Waters, Enclosed Bays, and Estuaries Plan and the Ocean Plan. These documents will be circulated for public comment. The process will follow state and federal requirements for public participation and for environmental and economic consideration.

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