

INITIAL STATEMENT OF REASONS AND PUBLIC REPORT
DEPARTMENT OF PESTICIDE REGULATION

Title 3. California Code of Regulations
Amend Section 6000 and Adopt Sections 6970 and 6972
Pertaining to Prevention of Surface Water Contamination by Pesticides

This is the Initial Statement of Reasons required by Government Code section 11346.2 and the public report specified in section 6110 of Title 3, California Code of Regulations (3 CCR). Section 6110 meets the requirements of Title 14 CCR section 15252 and Public Resources Code section 21080.5 pertaining to certified state regulatory programs under the California Environmental Quality Act.

SUMMARY OF PROPOSED ACTION/PESTICIDE REGULATORY PROGRAM
ACTIVITIES AFFECTED

The Department of Pesticide Regulation (DPR) proposes to amend section 6000 and adopt sections 6970 and 6972 of 3 CCR. The pesticide regulatory program activities that will be affected by the proposal are those pertaining to environmental monitoring and pesticide enforcement. In summary, the proposed action would identify pesticides that have a high potential to contaminate surface water in outdoor nonagricultural settings, and require pest control businesses, including maintenance gardeners, that apply these pesticides to take actions to minimize that contamination.

SPECIFIC PURPOSE AND FACTUAL BASIS

Pesticides are applied to crops and other rural and urban sites to control diseases, insects, weeds, and other pests. Some pesticides have contaminated surface water as a result of those applications. If pesticides reach surface water at certain concentrations, they can cause toxicity to aquatic organisms, including fish, invertebrates such as water fleas, and nonvascular plants such as algae. They can also exceed drinking water levels that are protective of human health. Food and Agricultural Code (FAC) section 11501 states that one of the purposes of Division 6 (Pest Control Operations) and the parts of Division 7 (Agricultural Chemicals, Livestock Remedies, And Commercial Feeds) of the FAC that address pesticide regulation is, "To protect the environment from environmentally harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of those pesticides."

Previous studies have shown that certain dormant insecticides are associated with toxicity to aquatic organisms in surface water. As a result, in 2007 DPR adopted 3 CCR section 6960 (Dormant Insecticide Contamination Prevention) to specify which dormant pesticides are subject to the regulations, require property operators to adopt one of several management options to protect surface water, specify under what conditions aerial applications can be made, and specify under what conditions no dormant insecticide shall be applied.

Federal, state and local entities have sampled surface water for pesticides, including the U.S. Geological Survey, Dow AgroSciences, DPR, the State Water Resources Control Board, the

Central Valley Regional Water Quality Control Board, Deltakeeper, the San Francisco Estuary Institute, the Sacramento River Watershed Program, and various regional water quality coalitions, counties, and cities. These sampling results are stored in the DPR Surface Water Database <<http://cdpr.ca.gov/docs/emon/surfwtr/surfddata.htm>>. This sampling has shown that pesticides contaminate surface water of both agricultural and urban areas.

The proposed regulatory action pertains to the following 17 pyrethroid pesticides: bifenthrin, bioallethrin, S-bioallethrin, cyfluthrin, beta-cyfluthrin, gamma-cyhalothrin, lambda-cyhalothrin, cypermethrin, deltamethrin, esfenvalerate, fenpropathrin, tau-fluvalinate, permethrin, phenothrin, prallethrin, resmethrin, and tetramethrin. These pesticides were selected based on the following criteria: (1) subject to the U.S. Environmental Protection Agency's (U.S. EPA's) Environmental Hazard and General Labeling for Pyrethroid Non-Agricultural Outdoor Products Notification of June 4, 2009, and (2) registered for outdoor structural, residential, industrial, or institutional use in California. DPR is proposing to adopt mitigation measures for these pesticides now because monitoring data indicate they are contaminating streams and rivers, and causing toxicity to aquatic organisms.

This proposal would adopt mitigation measures that would apply to the outdoor use of these pesticides when applied by pest control businesses, including maintenance gardeners, in nonagricultural settings. The mitigation measures would prohibit pesticide applications during rainfall, and reduce the amount of pesticides applied that would be subject to rainfall runoff.

The proposed regulation is described below:

Section 6000. Definitions

This proposal would adopt definitions of "aquatic habitat," "crack and crevice treatment," "impervious surfaces," "precipitation," and "spot treatment." These definitions are needed to clarify the language proposed for section 6970.

Section 6970. Surface Water Protection in Outdoor Nonagricultural Settings

DPR proposes to adopt section 6970 to specify allowable application methods for the 17 pesticides mentioned above when used in outdoor nonagricultural settings, and when applied by pest control businesses, including maintenance gardeners. These proposed application methods would reduce the amount of pesticides available for runoff to surface water. The proposed regulations apply to pest control businesses and maintenance gardeners, because the pesticide use reports they are required to submit to DPR indicate that they apply a major portion of the total amount of each of the 17 pesticides sold in California. Pesticide registrants are required to report to DPR the total amount of each pesticide sold for use in California. A pest control business is any person who engages in pest control for hire (advertises, solicits, or operates as a pest control business). A maintenance gardener is a person who is regularly engaged in the

business of maintenance gardening and who desires to engage in pest control for hire incidental to that business.

Proposed subsection (a) would limit the application methods to the soil surface, mulch, gravel, lawn, turf, or groundcover to the following methods: (1) spot treatments, (2) pin stream treatments of one-inch wide or less, (3) perimeter band treatments of three feet wide or less from the base of a building outward, and (4) broadcast treatments but not within two feet of any horizontal impervious surface. Pin stream treatment of one-inch wide or less may be made within the two-foot area. This proposal would also require that prior to precipitation, broadcast applications of termiticides to preconstruction sites must be covered with a waterproof covering, such as a polyethylene sheet, or a concrete slab poured over the treated soil.

Proposed subsection (b) would limit the application methods allowed to treat horizontal impervious surfaces to the following: (1) spot treatments, (2) crack and crevice treatments, and (3) pin stream treatments of one-inch wide or less.

Proposed subsection (c) would limit application methods to treat vertical structural surfaces, such as walls, foundations, windows, doors, and fencing to the following: (1) spot treatments, (2) crack and crevice treatments, (3) pin stream treatments of one-inch wide or less, and (4) perimeter band treatments up to a maximum height of two feet above the grade level.

For granule formulations, proposed subsection (d) would require the applicator to sweep any granules off the horizontal impervious surface back onto the treatment site.

In addition to DPR's proposal to limit applications to specific methods in order to reduce surface water contamination, DPR proposes to prohibit any application under certain circumstances. These additional restrictions are designed to prohibit applications during precipitation that can carry these pesticides in runoff water to surface water, and to reduce the amount of these pesticides applied that could be carried by rain water to surface water.

Proposed subsection (e) would prohibit applications during precipitation, except for applications made to areas under a structure and protected from precipitation. This proposed subsection would also prohibit applications to the soil surface, mulch, gravel, lawn, turf, groundcover, or horizontal impervious surfaces with standing water, including puddles; to a sewer or storm drain or curbside gutter; and to any of the following that drain to a sewer or storm drain, curbside gutter, or aquatic habitat: (1) visible drainage grates, (2) french drains, or (3) landscaped dry river beds, swales, or trenches filled with gravel or rock.

The proposal would prohibit application of the listed pesticides to the soil surface, including preconstruction termiticide sites, and to mulch, gravel, lawn, turf, groundcover, or horizontal impervious surfaces within 25 feet of aquatic habitat located downgradient from the application. The proposal would also prohibit application of preconstruction termiticides within 10 feet of a storm drain located downgradient from the application.

Additionally, proposed subsection (f) would prohibit applications to plants, shrubs, or trees where there is standing water in the dripline or perimeter of the plants, shrubs, or trees.

Section 6972. Exemptions from Surface Water Protection in Outdoor Nonagricultural Settings

Certain applications of the listed pesticides are exempt from the proposed mitigation measures because the pesticides would not be applied to surfaces exposed to rainfall and therefore would not be subject to runoff to surface water, or because specified uses are being addressed by the regional water quality control boards via National Pollutant Discharge Elimination System (NPDES) permits. These NPDES permits are issued under the Clean Water Act through the regional water boards. These exemptions are the following: (1) injection into soil or structural materials, such as bricks, concrete, or wood; (2) post-construction rod or trench termiticide application methods; (3) applications to below-ground insect nests, or nests made of mud or paper combs; (4) applications of baits in weather-proof stations or gel baits; (5) pesticide applications to receiving waters that are regulated by the Statewide General NPDES Permits for Pesticide Discharges to Waters of the U.S. from Spray Applications, and Vector Control Applications; (6) applications to the underside of eaves; and (7) foggers or mist applications.

CONSULTATION WITH OTHER AGENCIES

DPR consulted with the State Water Resources Control Board during the development of the proposed regulations as specified in the May 1997 Management Agency Agreement between DPR and the State Water Resources Control Board.

Additionally, DPR consulted with the California Department of Food and Agriculture during the development of the text of proposed regulations, as specified in FAC section 11454, and the February 6, 1992, Memorandum of Agreement that was developed per FAC section 11454.2.

Copies of the correspondence are in the rulemaking file.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION (GOVERNMENT CODE SECTION 11346.2(b))

DPR has not identified any feasible alternatives to the proposed regulatory action that would lessen any adverse impacts, including any impacts on small businesses, and invites the submission of suggested alternatives.

ECONOMIC IMPACT OF BUSINESS

The proposed regulations will not have a significant adverse economic impact upon business. The document relied upon to make this determination is listed in the "Documents Relied Upon" section of this initial statement of reasons and is available from DPR.

IDENTIFICATION OF ANY SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECT THAT CAN REASONABLY BE EXPECTED TO OCCUR FROM IMPLEMENTING THE PROPOSAL

DPR's review of the proposed action showed that no significant adverse environmental effect to California's air, soil, water, plants, fish, or wildlife could reasonably be expected to occur from implementing the proposal. Therefore, no alternatives or mitigation measures are proposed to lessen any significant adverse effects on the environment.

EFFORTS TO AVOID UNNECESSARY DUPLICATION WITH FEDERAL REGULATIONS

The proposed action does not duplicate or conflict with the Code of Federal Regulations.

DOCUMENTS RELIED UPON

1. U. S. Environmental Protection Agency. Environmental Hazard and General Labeling for Pyrethroid Non-Agricultural Outdoor Products. June 2009. Available at: <<http://www.epa.gov/oppsrrd1/reevaluation/environmental-hazard-statment.html>>, verified September 6, 2011.
2. Memorandum from Ann Prichard, Registration Branch Chief to John Sanders, Environmental Monitoring Branch Chief. June 6, 2011. Surface Water Regulations: List of Active Ingredients for Consideration.
3. Jiang, W., K. Lin, D. Haver, S. Qin, G. Ayre, F. Spurlock, and J. Gan. 2010. Wash-off Potential of Urban Use Insecticides on Concrete Surfaces. Environ. Toxicol. Chem. 29:1203-1208.
4. Economic Analysis for Proposed Regulation Department of Pesticide Regulation No. 11-004. California Environmental Protection Agency, Economic Studies Section, Air Resources Board. Memorandum from Stephen Storelli to Linda Irokawa-Otani, Regulations Coordinator, DPR. August 30, 2011.