

TITLE 3. DEPARTMENT OF PESTICIDE REGULATION
Designating Chlorpyrifos as a Restricted Material
DPR Regulation No. 14-002

NOTICE OF PROPOSED REGULATORY ACTION

The Department of Pesticide Regulation (DPR) proposes to amend section 6400(e) of Title 3, California Code of Regulations (3 CCR). The proposed action would designate the active ingredient chlorpyrifos as a state-restricted material when labeled for the production of an agricultural commodity.

SUBMITTAL OF COMMENTS

Any interested person may present comments in writing about the proposed action to the agency contact person named below. Written comments must be received no later than 5:00 p.m. on November 12, 2014. Comments regarding this proposed action may also be transmitted via e-mail to <dpr14002@cdpr.ca.gov> or by facsimile at 916-324-1451.

A public hearing is not scheduled. However, one will be scheduled if any interested person submits a written request to DPR no later than 15 days prior to the close of the written comment period.¹

EFFECT ON SMALL BUSINESS

DPR has determined that the proposed regulatory action does affect small businesses.

INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW

DPR protects human health and the environment by regulating pesticide sales and use and by fostering reduced-risk pest management. DPR's strict oversight includes: product evaluation and registration; statewide licensing of commercial and private applicators, pest control businesses, dealers, and advisers; environmental monitoring; and residue testing of fresh produce. This statutory scheme is set forth primarily in Food and Agricultural Code (FAC) Divisions 6 and 7.

Pesticides must be registered (licensed for sale and use) with the U.S. Environmental Protection Agency (U.S. EPA) before they can be registered in California. DPR's preregistration evaluation is in addition to, and complements, U.S. EPA's evaluation. Before a pesticide can be sold or used in California, both agencies require data on a product's toxicology and chemistry--how it behaves in the environment; its effectiveness against targeted pests and the hazards it poses to nontarget organisms; its effect on fish and wildlife; and its degree of worker/bystander exposure.

¹ If you have special accommodation or language needs, please include this in your request for a public hearing. TTY/TDD speech-to-speech users may dial 7-1-1 for the California Relay Service.

Chlorpyrifos is a broad-spectrum insecticide widely used in California for the control of foliage and soil-borne insect pests on a variety of food and feed crops. Chlorpyrifos is also used on non-food sites such as golf course turfs, industrial sites, and seed treatment. Chlorpyrifos products are available in several different formulations, such as liquid emulsifiable concentrate, granular, microencapsulate, and wettable powder. Chlorpyrifos belongs to a classification of chemicals known as organophosphates, which adversely affect the nervous system by inhibiting the activity of cholinesterase (ChE), an enzyme necessary for the proper functioning of the nervous system. ChE inhibition can result in overstimulation of the nervous system causing nausea, dizziness, confusion, and at very high exposures (e.g., accidents or major spills), respiratory paralysis and death. Additionally, exposure to chlorpyrifos has also been linked to long-term neurological effects.

Certain chlorpyrifos products are designated as a federally restricted-use pesticide (RUP) pursuant to section 3 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). Pursuant to Title 40 Code of Federal Regulations section 171.11, sales and use of these pesticides are limited to certified applicators and those under their direct supervision, thus controlling the number of persons with direct access to the chemical. In California, applicators become certified by taking an examination to demonstrate they have the knowledge and proficiency required to use restricted materials, and maintain certification by completing DPR pre-approved continuing education courses.

3 CCR section 6400(a) states that any pesticide labeled as an RUP pursuant to section 3 of FIFRA is also designated as a restricted material in California. In accordance with FAC section 14015, restricted materials can only be purchased by, possessed, or used by or under the direct supervision of, a certified private applicator or a certified commercial applicator. Generally, the purchase, possession, and use of a restricted pesticide are allowed only under a permit issued by the local county agricultural commissioner (CAC). However, 3 CCR section 6414(b) exempts those pesticides deemed state-restricted solely under section 6400(a) as an RUP from a restricted materials permit provided the pesticide is used by or under the supervision of, a certified applicator, unless otherwise required by the CAC. Therefore, the restricted materials permit requirement currently does not apply to federal RUP chlorpyrifos products.

Chlorpyrifos is used on more than 60 different agricultural commodities in California. Currently, 30 products containing the active ingredient chlorpyrifos are registered by DPR for agricultural use on agricultural commodities. In addition, Section 24(c) of FIFRA allows states to register additional uses of a registered product if there is a demonstrated "special local need" for the product. As of July 2014, there are eight Section 24(c) special local need registrations for use on various agricultural commodities in California that would also be subject to the proposed regulation. Approximately 66 percent of agricultural applications are conducted via ground application methods (ground boom or air blast sprayer) and 33 percent aurally (helicopter or fixed wing). Chlorpyrifos also is used for purposes other than production of agricultural commodities, such as applications to golf courses, rights of way, landscape areas, non-residential structures, and livestock housing. However, these other uses comprise less than one percent of chlorpyrifos use.

Due to its wide use, toxicity, and semi-volatile nature, DPR and the California Air Resources Board (ARB) monitored ambient and off-site levels in air for chlorpyrifos. The air monitoring studies show that chlorpyrifos is one of the most frequently detected agricultural pesticides in California, but few of the detections have exceeded the screening levels. As part of DPR's mandate for "continuous evaluation" of currently registered pesticides, DPR implemented a multi-year statewide air monitoring network for measuring pesticides in various agricultural communities. In 2011 and 2012, chlorpyrifos was one of the most frequently detected chemicals. Chlorpyrifos was detected in 32 percent of the samples collected in 2011, and 28 percent of the samples collected in 2012. All ambient air detections were at low concentrations relative to their screening levels.

Also, based on the California Pesticide Illness Surveillance Program, between 2001 and 2011, 35 different agricultural chlorpyrifos applications were identified as "possibly," "probably," or "definitely" associated with chlorpyrifos use alone, or in combination with other pesticides in which 136 people were exposed due to drift.

In addition to air monitoring, DPR conducts surface water sampling to monitor for potential environmental contamination of water bodies due to pesticides. Once applied to the field, chlorpyrifos can move off-site in runoff water or become attached to sediment. Factors such as climate, soil characteristics, field slope, and water/ irrigation management influence the off-site movement of chlorpyrifos. Drift is another pathway for direct deposition into waterways in some cases. DPR's surface water monitoring data indicate chlorpyrifos is frequently detected in rivers and streams in agricultural areas in California, often at concentrations that exceed water quality benchmarks for aquatic invertebrates.

Existing law (FAC sections 14004.5 and 14005) authorizes the Director to adopt, by regulation, a list of restricted materials based upon criteria including danger of impairment of public health; hazards to pesticide applicators, farmworkers, and domestic animals; hazards to the environment from pesticide drift onto streams, lakes, and wildlife sanctuaries; and hazards to wildlife and other crops through persistent residues in the soil. Based on findings that chlorpyrifos has the propensity to move off-site in both air and surface water, and has caused illnesses and surface water contamination due to off-site movement, DPR proposes to designate chlorpyrifos as a California-restricted material when labeled for the production of an agricultural commodity, adding it to the listing in section 6400(e).

Chlorpyrifos, designated as a state-restricted material under section 6400(e), can only be sold to, purchased by, possessed or used by, a person who holds a restricted material permit issued by the local CAC. The permit requirement will provide an effective mechanism to facilitate CAC oversight of chlorpyrifos use by certified applicators. CACs will be able to evaluate chlorpyrifos use in the specific local conditions of each application site. Furthermore, users of restricted materials listed in section 6400(e) are required to submit a "Notice of Intent" (NOI) to the CAC 24 hours prior to each application of a restricted material. The NOI is required to provide site and time specific application information to allow the CAC to evaluate the proposed application to determine if any additional protections are necessary. This information can also be used by the CACs in their compliance monitoring activities to ensure label restrictions are followed.

At this time, DPR is not proposing to designate chlorpyrifos as a state-restricted material when used for purposes other than production of agricultural commodities. These applications are much smaller and have lower health and environmental risk compared to agricultural commodity applications, and these applications comprise less than one percent of chlorpyrifos' use.

Off-site movement in the air could result in acute exposure effects of ChE inhibition to bystanders as well as increasing the risk of long-term neurological effects. Chlorpyrifos is toxic to freshwater fish, aquatic invertebrates and estuarine and marine organisms. Adoption of these regulations will provide a benefit to public health, worker safety, and the environment by reducing potential unintended exposures when used for the production of an agricultural commodity.

During the process of developing these regulations, DPR conducted a search of any similar regulations on this topic and has concluded that these proposed regulations are neither inconsistent nor incompatible with existing state regulations. DPR is the only state agency that has the authority to regulate pesticides. No other state agency has the authority to designate pesticides as restricted materials. DPR is not aware of any state agencies regulating the use of chlorpyrifos.

IMPACT ON LOCAL AGENCIES OR SCHOOL DISTRICTS

DPR has determined that the proposed regulatory action does not impose a mandate on local agencies or school districts, nor does it require reimbursement by the state pursuant to Part 7 (commencing with section 17500) of Division 4 of the Government Code, because the regulatory action does not constitute a "new program or higher level of service of an existing program" within the meaning of section 6 of Article XIII of the California Constitution. DPR has also determined that no nondiscretionary costs or savings to local agencies or school districts are expected to result from the proposed regulatory action.

COSTS OR SAVINGS TO STATE AGENCIES

DPR has determined that no savings or increased costs to any state agency will result from the proposed regulatory action.

EFFECT ON FEDERAL FUNDING TO THE STATE

DPR has determined that no costs or savings in federal funding to the state will result from the proposed action.

EFFECT ON HOUSING COSTS

DPR has made an initial determination that the proposed action will have no effect on housing costs.

SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESSES

DPR has made an initial determination that adoption of this regulation will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

COST IMPACTS ON REPRESENTATIVE PRIVATE PERSONS OR BUSINESSES

DPR has made an initial determination that the adoption of this regulation is unlikely to have a significant cost impact on representative private persons or businesses. The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action. The additional costs faced by growers should not significantly affect their operations or have any adverse economic impact on the sector.

RESULTS OF THE ECONOMIC IMPACT ANALYSIS

Benefit to the environment, worker safety, and the health of California residents: Designating chlorpyrifos as a restricted material should provide an effective mechanism to implement appropriate mitigation measures, including specific training and certification requirements, and facilitate CAC on-site evaluation to ensure worker safety and environmental protections, thereby preventing possible exposures when chlorpyrifos is used for the production of agricultural commodities.

Impact on the Creation, Elimination, or Expansion of Job/Businesses: DPR has determined it is unlikely the proposed regulatory action will impact the creation or elimination of jobs, the creation of new businesses or the elimination of existing businesses, or the expansion of businesses currently doing business with the State of California.

CONSIDERATION OF ALTERNATIVES

DPR must determine that no reasonable alternative considered by the agency, or that has otherwise been identified and brought to the attention of the agency, would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed regulatory action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of the law.

AUTHORITY

This regulatory action is taken pursuant to the authority vested by FAC sections 14004.5 and 14005.

REFERENCE

This regulatory action is to implement, interpret, or make specific FAC sections 14004.5 and 14005.

AVAILABILITY OF STATEMENT OF REASONS AND TEXT OF PROPOSED REGULATIONS

DPR has prepared an Initial Statement of Reasons and has available the express terms of the proposed action, all of the information upon which the proposal is based, and a rulemaking file. A copy of the Initial Statement of Reasons and the proposed text of the regulation may be obtained from the agency contact person named in this notice. The information upon which DPR relied in preparing this proposal and the rulemaking file are available for review at the address specified below.

AVAILABILITY OF CHANGED OR MODIFIED TEXT

After the close of the comment period, DPR may make the regulation permanent if it remains substantially the same as described in the Informative Digest. If DPR does make substantial changes to the regulation, the modified text will be made available for at least 15 days prior to adoption. Requests for the modified text should be addressed to the agency contact person named in this notice. DPR will accept written comments on any changes for 15 days after the modified text is made available.

AGENCY CONTACT

Written comments about the proposed regulatory action; requests for a copy of the Initial Statement of Reasons, and the proposed text of the regulation; and inquiries regarding the rulemaking file may be directed to:

Linda Irokawa-Otani, Regulations Coordinator
Department of Pesticide Regulation
1001 I Street, P.O. Box 4015
Sacramento, California 95812-4015
916-445-3991

Note: In the event the contact person is unavailable, questions on the substance of the proposed regulatory action may be directed to the following back-up person at the same address as noted below:

Linda O'Connell, Environmental Program Manager
Worker Health and Safety Branch
916-445-1717

This Notice of Proposed Action, the Initial Statement of Reasons, and the proposed text of the regulation are also available on DPR's Internet Home Page <<http://www.cdpr.ca.gov>>. Upon request, the proposed text can be made available in an alternate form as a disability-related accommodation.

AVAILABILITY OF FINAL STATEMENT OF REASONS

Following its preparation, a copy of the Final Statement of Reasons mandated by Government Code section 11346.9(a) may be obtained from the contact person named above. In addition, the Final Statement of Reasons will be posted on DPR's Internet Home Page and accessed at <<http://www.cdpr.ca.gov>>.

DEPARTMENT OF PESTICIDE REGULATION

Director

Date