

Department of Pesticide Regulation's Draft Restrictions to Address Pesticide Drift and Runoff to Protect Surface Water

February 1, 2010

Drift Management to Protect Surface Water—Agricultural Use

(a) This section applies to the agricultural use of pesticides to protect surface water from pesticide drift. Except as provided in paragraph (b), the operator of the property to be treated with pesticides listed in Attachment I, and persons performing pest control using such pesticides for the operator, shall comply with the following restrictions:

- (1) Ground applications, other than applications addressed in subparagraph (a)(2), shall not be made within 25 feet of any sensitive aquatic site (defined in Attachment II).
- (2) Airblast, high-pressure (≥ 60 psi) wand or high-pressure hand gun applications shall not be made within 100 feet of any sensitive aquatic site (defined in Attachment II).
- (3) Aerial applications shall not be made within 150 feet of any sensitive aquatic site (defined in Attachment II), or in the case of forestry applications, the distance specified by the local regional water quality control board if greater than 150 feet.
- (4) Aerial applications to deciduous plants during the dormant season shall only be allowed if soil conditions do not allow field entry, or approaching bloom conditions necessitate aerial application, and if the operator of the property obtains a written recommendation from a licensed pest control adviser.

(b) The following uses and sites are exempt from the requirements of this section.

- (1) apiaries
- (2) aquaculture
- (3) livestock production (meat or milk)
- (4) post-harvest commodity treatment on the farm
- (5) poultry production (meat or eggs)
- (6) injections into soil
- (7) applications immediately incorporated into soil. If incorporation is by irrigation, the irrigation shall be applied at rates that do not cause runoff.
- (8) applications to animal burrows
- (9) injections into or painted or wicked onto trees, shrubs, or other plants
- (10) intentional applications to water
- (11) applications as enclosed baits

Drift Management to Protect Surface Water- Outdoor Structural, Residential, Industrial, and Institutional Use:

(a) This section applies to persons applying pesticides for hire on outdoor structural, residential, industrial, and institutional sites to protect surface water from pesticide drift. Except as provided in paragraphs (b) and (c), persons performing pest control for hire using pesticides listed in Attachment I, shall comply with the following restrictions:

- (1) Ground applications, other than the types of applications specified in (a)(2), shall not be made within 25 feet of any sensitive aquatic site (defined in Attachment II).
- (2) Airblast or high-pressure (≥ 60 psi) wand or high-pressure hand gun applications shall not be made within 100 feet of any sensitive aquatic site (defined in Attachment II).

(b) The following uses and sites are exempt from the requirements of this section:

- (1) injections into soil
- (2) applications immediately incorporated into soil. If incorporation is by irrigation, the irrigation shall be applied at rates that do not cause runoff.
- (3) applications to animal burrows
- (4) injections into or painted or wicked onto trees, shrubs, or other plants
- (5) intentional applications to water.

(c) Pesticide applications are exempted from the requirements of paragraph (a) of this section if the pest control business making the application has been certified by an organization that has adopted standards or requirements of a green or sustainable program, as defined in Appendix II, which has been approved by the director. The pesticide control business shall be in compliance with those standards or requirements during, and maintain records of the certification for two years after, the application.

Runoff Management to Protect Surface Water- Agricultural Production

(a) This section applies to the production of an agricultural commodity to protect surface water from stormwater and irrigation runoff containing pesticides. Except as provided in paragraphs (b) and (c), the operator of the property to be treated with pesticides as listed in Attachment I, and persons performing pest control using such pesticides for the operator, shall comply with the following restrictions:

- (1) Do not make pesticide applications if soil moisture is at field capacity and a storm event, forecasted by the National Weather Service, is to occur within 48 hours following application; or a storm event likely to produce runoff from the treated area is forecasted by the National Weather Service to occur within 48 hours following the application.
- (2) (A) Apply the pesticide only if the application is followed by the use of a technology or product that rapidly degrades or reduces offsite movement of the pesticide so that it will not adversely affect water quality. The technology or product shall be approved and publicly noticed by the director on the DPR's Web site, after consultation with the State Water Resources Control Board, and approval shall be

based on scientific data demonstrating the effectiveness in rapidly degrading or reducing offsite movement of the pesticide to surface water, or comply with subparagraphs (B) and (C).

(B) To mitigate pesticide offsite movement due to rain runoff,

(I) for four weeks after application, divert any rain runoff with an on-site recirculating system and/or contain and hold any rain runoff for 72 hours before releasing into a sensitive aquatic site. If there are sequential storms that would result in a holding period longer than 72 hours, the property operator may release proportional amounts of runoff consistent with the estimated amount of runoff from, and the 72-hour holding time for, each storm, or

(II) For pesticides also listed in section 6800(a) of Title 3 of the California Code of Regulations (3CCR) and used in ground water protection areas, during the period October 1 through March 31, comply with the appropriate management practice in 3CCR section 6487.4. For applications of pesticides listed in section 6800(a) and used in ground water protection areas during the period April 1 through September 30, comply with the provisions of subparagraph (C), and

(C) To mitigate pesticide offsite site movement due to irrigation runoff, for four weeks after application, divert any irrigation runoff with an on-site recirculating system and/or contain and hold any irrigation runoff for 72 hours from the time runoff would start before releasing into a sensitive aquatic site. If there are consecutive sets of irrigation on a field that would result in a holding period longer than 72 hours, the property operator may release proportional amounts of runoff consistent with the estimated amount of runoff from, and the 72-hour holding time for, each irrigation set.

(b) The following uses and sites are exempt from the requirements of this section.

(1) apiaries

(2) aquaculture

(3) livestock production (meat or milk)

(4) post-harvest commodity treatment on the farm

(5) poultry production (meat or eggs)

(6) injections into soil

(7) applications immediately incorporated into soil. If incorporation is by irrigation, the irrigation system shall only be a pressurized system, such as macro- or microsprinklers or drip or trickle irrigation, applied at rates and a duration that will not cause runoff during the incorporation.

(8) applications to animal burrows

(9) injections into or painted or wicked onto trees, shrubs, or other plants

(10) intentional applications to water.

(11) applications made to hydrologically isolated sites.

(c) If both of the following conditions are met, pesticide applications are exempted from the requirements of paragraph (a) of this section:

(1) At the time of the application, the operator of the property obtains and follows a written recommendation from a licensed pest control adviser for the pesticide application. The criteria used for determining the need for the recommended treatment, required to be specified in a written recommendation by 3CCR section

6556(d), shall include a description of the economic threshold or other benchmark(s) used to guide decision-making, along with pest scouting records, degree-day or other modeling reports, or other information that was used to justify the recommended treatment, and

(2) At the time of application, the operator of the property possesses and is implementing a surface water quality management plan, as defined in Attachment II, to prevent the pesticide from leaving the property at levels that would adversely affect water quality.

Runoff Management to Protect Surface Water–NonProduction

Agricultural, Outdoor Structural, Residential, Industrial, and Institutional Use

(a) This section applies to persons applying pesticides for hire on nonproduction agricultural, outdoor structural, residential, industrial, and institutional sites to protect surface water from stormwater and irrigation runoff containing pesticides. Except as provided in paragraphs (b), (c), and (d) persons performing pest control for hire using pesticides listed in Attachment I, shall comply with the following restrictions:

- (1) Do not make applications to nonproduction agricultural, outdoor industrial, outdoor institutional or outdoor structural sites if a storm event, forecasted by the NWS, is to occur within 48 hours following application.
- (2) All outdoor non-termiticide applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structure walls or siding shall be limited to spot and crack-and-crevice applications only. This does not apply to applications to building foundations, up to a maximum height of three feet.
- (3) Sweep pesticide granules off nonpervious surfaces following application.
- (4) If the concrete slab is not to be poured before rainfall is possible, cover termiticides after application to prevent runoff.
- (5) Do not apply to saturated soils.
- (6) Except when applying to sewers or drains as directed on the pesticide label, do not apply directly into sewers or drains, or within 10 feet of any drain or to any area like a gutter where drainage to sewers, storm drains, or sensitive aquatic sites can occur.
- (7) Do not apply unless the property operator or resident has been advised not to allow irrigation runoff for 72 hours after application.

(b) For pesticides also listed in section 6800(a), used in ground water protection areas, and applied during the period October 1 through March 31, the applicator may choose to ensure compliance with the provisions in 3CCR section 6487.4, in lieu of compliance with paragraph (a). For applications of pesticides also listed in section 6800(a) and applied in ground water protection areas during the period April 1 through September 30, the applications must comply with the provisions of paragraph (a).

(c) The following uses and sites are exempt from the requirements of this section.

- (1) injections into soil

(2) applications immediately incorporated into soil. If incorporation is by irrigation, the irrigation system shall only be a pressurized system, such as macro- or microsprinklers or drip or trickle irrigation, applied at rates and a duration that will not cause runoff during the incorporation.

(3) applications to animal burrows

(4) injections into or painted or wicked onto trees, shrubs, or other plants

(5) intentional applications to water.

(6) applications as enclosed baits

(d) Pesticide applications are exempted from the requirements of paragraph (a) of this section if the pest control business making the application has been certified by an organization that has adopted standards or requirements of a green or sustainable program, as defined in Appendix II, which has been approved by the director. The pesticide control business shall be in compliance with those standards or requirements during, and maintain records of the certification for two years after, the application.

Attachment I

Pesticides with a High Potential to Contaminate Surface Water.–The following pesticides have been determined to have a high potential to contaminate surface water.

Pesticide

Alachlor

Aldicarb

Atrazine

Azinphos-methyl

Benefin (benfluralin)

Bentazon, sodium salt

beta-Cyfluthrin

Bifenthrin

Bromacil

Carbaryl

Carbofuran

Chlorpyrifos

Cyfluthrin

Cypermethrin

S-cypermethrin

Deltamethrin

Diazinon

Dicamba, dimethylamine salt

Dicamba, sodium salt

Dicofol

Dimethoate

Disulfoton

Diuron

Esfenvalerate

Ethalfuralin

Ethoprop

Fenoxycarb

Fenpropathrin

Fipronil
gamma-Cyhalothrin
Hexazinone
Imidacloprid
lambda-Cyhalothrin
Linuron
Malathion
MCPA
MCPA, dimethylamine salt
MCPA, 2-ethyl hexyl ester
MCPA, isooctyl ester
Methidathion
Methiocarb
Methomyl
Methyl parathion
Metolachlor
S-metolachlor
Metribuzin
Naled
Norflurazon
Oryzalin
Oxadiazon
Oxyfluorfen
Pendimethalin
Permethrin
Phorate
Phosmet
Prodiamine
Prometryn
Propanil
Propargite
Propoxur
Propyzamide (pronamide)
Pyriproxifen
Siduron
Simazine
Tetrachlorvinphos
Triallate
Tribufos (Folex - S,S,S-tributyl phosphorotrithioate)
Trifluralin

Attachment II

“Sensitive aquatic site” means any irrigation or drainage ditch, canal, or other body of water in which the presence of pesticides could cause adverse impacts on human health or aquatic organisms.

“Hydrologically isolated site” means any treated area that does not produce runoff capable of entering any sensitive aquatic site.

“Surface water quality management plan” means a farm, conservation or other plan that has been developed in cooperation with, and meets the requirements of, conservation agencies, certifiers of organic or sustainable agricultural products or other organizations, that have been approved by the director. Such plans must include a pest management component, as defined in Attachment II, and an irrigation and stormwater runoff management component. The DPR Director shall approve these organizations in a public notice, and post a list of the approved organizations on the DPR’s Web site.

“Pest management component” must include the following or the equivalent:

(1) location of the cropped area and the identification of the crop and pest(s) to be treated with a chemical listed in Attachment 1; (2) for each of those crops/pests: the crop stage, frequency, and method of counting the pest and any natural enemies, to be used in a monitoring (scouting) program, or a description of the pest predictive model, such as degree-days, to be used; (3) a requirement that scouting records be kept showing the levels of the pest and any natural enemies monitored, or that the model results be specified; (4) treatment thresholds or the treatment decision making process to be used, and any treatment timing guidelines; (5) for crops covered by a University of California (UC) Year-Round Integrated Pest Management (IPM) Program, a filled out up-to-date annual IPM checklist pertaining to the pest to be treated; and (6) for crops not covered by a UC Year-Round IPM Program, a requirement that the UC IPM Pest Management Guidelines, if available, be followed.

“Green or sustainable program” means a pest control program that includes the following, or equivalent, elements: proper identification and monitoring of the pest; consideration of the factors that contribute to the pest infestation and how those factors might be used to help control the pest; evaluation of alternative pest control methods and pesticides that minimize risks to health and the environment, appropriate targeting, timing, and method of any pesticide application to minimize the risk to nontarget organisms and the environment; and an evaluation of the effectiveness of the pest control program.