Department of Pesticide Regulation

Teresa Marks Acting Director

Gavin Newsom Governor

Jared Blumenfeld Secretary for Environmental Protection

California Notice 2019-05 Supersedes California Notice 2018-06

TO: Pesticide Registrants and Other Stakeholders

SUBJECT: CHANGES TO CALIFORNIA-LIKE CONDITIONS FOR TERRESTRIAL FIELD DISSIPATION STUDIES

The Pesticide Contamination Prevention Act (PCPA) requires applicants for registration of an agricultural use pesticide to submit at least one terrestrial field dissipation (TFD) study conducted under "California or similar environmental use conditions" [California Food and Agricultural Code section 13143(a)(6)]. The Department of Pesticide Regulation (DPR) issued California Notice 2018-06 to provide guidance to applicants regarding California-like conditions for TFD studies. The purpose of TFD studies are to assess the likelihood of a pesticide product to pollute ground water.

DPR is revising its guidance based on comments from the Western Plant Health Association. This notice informs pesticide registrants and other stakeholders of revisions to the guidance found in California Notice 2018-06 and extends the effective date to **July 1, 2020**.

For applications submitted July 1, 2020 or later, DPR will consider a TFD study to have been conducted under "California or similar environmental use conditions," if the study was conducted within or outside of California in accordance with U.S. EPA study guidelines and under the following criteria:

1. Timing: April 1 shall be the earliest study start date and September 30 shall be the latest start date. This timing ensures a potential leaching environment with respect to the amount of percolating water produced relative to evapotranspiration (ET).

2. Soil:

- The study is conducted in a coarse-texture soil in accordance to the U.S. Department of Agricultural (USDA) soil textural classification (Table 1). The minimum depth-weighted average sand content for representative samples taken across the test site should be no less than 68% as measured within the top 30 cm of soil. The allowable minimum soil sand content that is included in the average is 61%.
- The soils used for the study do not have a restrictive layer to the movement of water as indicated within the soil profile, such as a hardpan, compacted layer, or an abrupt change in texture.

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- The maximum depth-weighted average organic matter content for representative samples taken across the test site should be no greater than 1.4% as measured within the top 30 cm of soil. The allowable maximum organic matter content that is included in the average is 1.6%.
- Studies shall be conducted on bare soil plots. Exceptions are possible for studies conducted in the presence of a crop or turf with sufficient justification.

3. Water Inputs:

- Water applications to the study site are sufficient to create levels of percolating water that reflect the potential amount lost from crop irrigations (i.e., 160% of ET). Approximately 60% of applied water is available for movement below the coring depth, which would equate to water applications of approximately 160% of ET. Therefore, a scheduled water input would approximate the cumulative daily ET since the previous water input multiplied by an excess demand factor of 1.6. For bare soil plots ET can represent reference ET or if preferred soil evaporation when calculated using a scientifically defensible methodology. These water inputs supersede those in the U.S. EPA guidance document for TFD studies.
- The initial water application to the study site occurs within 1 week of chemical application. Subsequent water applications shall be at 7-day intervals or less for the duration of the study.
- Water inputs from rain are subtracted from scheduled water input amounts.

If a TFD study submitted to DPR to meet the statutory requirement of having been conducted under "California or similar environmental use conditions," does not meet one or more of the above criteria, the applicant may include in its submission a justification for any different criteria to avoid a determination that the study is unacceptable.

If you have questions regarding the registration process, please contact the Pesticide Registration Ombudsman, Mr. Russell Darling at <Registration.Ombudsman@cdpr.ca.gov> or by telephone at 916-324-3547. If you have questions regarding the evaluation of pesticides for ground water protection, please contact Joy Dias at <Joy.Dias@cdpr.ca.gov> or by telephone at 916-324-4183.

Original signed by Ann M. Prichard

Ann M. Prichard, Chief Pesticide Registration Branch 916-324-3931 May 28, 2019

Date

cc: Mr. Russell Darling, Senior Environmental Scientist (Specialist), DPR

Common Names of Soils (General Texture)	% Sand	% Silt	% Clay	Textural Class	Acceptable Textural Classes
Sandy soils (Coarse texture)	86-100	0-14	0-10	Sand	Acceptable
	70-86	0-30	0-15	Loamy sand	Acceptable
Loamy soils (Moderately coarse texture)	50-70	0-50	0-20	Sandy loam	Acceptable if sand content is greater than 68%
Loamy soils (Medium texture)	23-52	28-50	7-27	Loam	Not acceptable
	20-50	74-88	0-27	Silty loam	Not acceptable
	0-20	88-100	0-12	Silt	Not acceptable
Loamy soils (Moderately fine texture)	20-45	15-52	27-40	Clay loam	Not acceptable
	45-80	0-28	20-35	Sandy clay loam	Not acceptable
	0-20	40-73	27-40	Silty clay loam	Not acceptable
Clayey soils (Fine texture)	45-65	0-20	35-55	Sandy clay	Not acceptable
	0-20	40-60	40-60	Silty clay	Not acceptable
	0-45	0-40	40-100	Clay	Not acceptable

Table 1. USDA textural classes¹ of soils acceptable for TFD studies.

¹ Based on USDA particle-size classification.