



Mary-Ann Warmerdam
Director

Arnold Schwarzenegger
Governor

Dear Registrant:

Reevaluation of Certain Liquid Formulation Agricultural and Commercial Structural-Use Pesticide Products

Pursuant to Article 8, Subchapter 1, Chapter 2, Division 6 of Title 3 of the California Code of Regulation, the Director of the Department of Pesticide Regulation (DPR) placed certain of your pesticide products into reevaluation (See Attachment A).

DPR may, at anytime, evaluate a registered pesticide to carry out the provisions of Title 3 of the California Code of Regulations, section 12824. DPR is required to investigate all reported pesticide episodes and information received indicating that a pesticide may have caused, or is likely to cause, a significant adverse impact. If the Director finds from the investigation that a significant adverse effect has occurred or is likely to occur, the pesticide involved shall be reevaluated. Therefore, certain liquid formulation agricultural and commercial structural-use products, including your product(s) listed in Attachment A, are being reevaluated.

DPR initiates this reevaluation based on concerns about the release into the atmosphere of volatile organic compounds (VOCs) from agricultural and commercial structural-use pesticide products. VOCs and nitrogen oxides react with sunlight to create ground-level ozone. Ozone is a major air pollutant, which is known to be harmful to both human health and vegetation. Many pesticide active ingredients and inert ingredients are VOCs.

Background

The federal Clean Air Act requires states to submit state implementation plans (SIP) for implementing, maintaining, and enforcing national ambient air quality standards (NAAQS) for air pollutants, such as ozone, in each air quality control region of the State. Any region that does not meet the NAAQS for a given pollutant is designated as a federal nonattainment area (NAA). Currently, several California air quality control regions do not meet the NAAQS for ozone.

In 1994, the California Air Resources Board (ARB) submitted a SIP to the U.S. Environmental Protection Agency (U.S. EPA). The SIP included a pesticide element. The pesticide element (also referred to as the Pesticide SIP) addresses VOCs that result from the use of agricultural and commercial structural-use pesticides. (Consumer pesticide product sources of VOCs are regulated by ARB.) In the pesticide element, DPR committed to reducing VOC emissions from agricultural and commercial structural-use pesticides by specified amounts within specified time periods for five NAAs. Currently three of the five NAAs do not meet the goals established in the 1994 SIP (Relative to 1990 base year: San Joaquin Valley, 12 percent reduction by 1999; Ventura, 20 percent reduction by 2005; and Southeast Desert, 20 percent reduction by 2007.)



To implement the 1994 SIP, DPR developed a method to estimate the VOC content (emission potential) of pesticide products and to calculate estimated pesticidal VOC emissions. DPR used thermogravimetric analysis (TGA) data to determine the VOC content of each pesticide product, and in conjunction with data from DPR's pesticide use-reporting system calculated estimated annual VOC emission totals for each pesticide product. In order to obtain TGA data on each agricultural and commercial structural-use pesticide, DPR placed all agricultural and commercial structural-use pesticides formulated as liquids into reevaluation in 1994, and all solid formulations into reevaluation in 1995.

However, during these reevaluations, DPR gave registrants the option of calculating the VOC emission potential of a pesticide product using water and/or inorganic subtraction, instead of submitting TGA data. In addition, if no data (either TGA or subtraction) were submitted for a given pesticide product, DPR assigned the product a default emission potential value based on the highest TGA value for the product's formulation category (default values were later revised to the median TGA value for each formulation category). In 1996, DPR requested that registrants of new agricultural and commercial structural-use products submit TGA data for each new product. A few registrants of new pesticide products submitted TGA data; however, the majority of registrants did not, and DPR had to assign default emission potential values to many new pesticide products.

As a result, DPR only has TGA data for approximately 30-40 percent of currently registered agricultural and commercial structural-use pesticides. This means that DPR's current calculations of total VOC emissions from pesticide products may be inaccurate. DPR needs actual TGA emission potential data for each currently registered agricultural and commercial structural-use pesticide product. Since pesticide products formulated as liquids (i.e., emulsifiable concentrates, aqueous concentrates, flowable concentrates, oils) have the highest VOC emission potential and constitute the bulk of the products with unknown (default) emission potentials, this reevaluation focuses on liquid pesticides. DPR is placing certain liquid products into reevaluation and requiring the submission of TGA data on each product. This data is necessary to reduce the uncertainty in DPR's emission inventory, and allow DPR to more accurately determine reductions in total VOC emissions from pesticide products. Once DPR receives TGA data for the products included in this reevaluation, DPR estimates that it will have accurate data for 90-95 % of VOC emissions from pesticide products in California.

Reevaluation Criteria

Pesticide products included in this reevaluation, including your products, meet all of the following criteria:

1. Formulated as a liquid (i.e., solution, emulsifiable concentrate, aqueous concentrate, flowable, oil);
2. Actively registered as of August 30, 2004;

3. Registered for use in California on at least one agricultural or commercial structural-use site;
4. DPR's 2002 statewide pesticide use report indicates that, the product, or a product with an identical "registration number," was applied in an amount greater than 10 pounds. Products with the same "registration number" include additional brand names and distributor registrations (subregistrations), the formulations of which are assumed not to differ in any substantive way;
5. DPR does not currently have a TGA-based emission potential on file for the product, or any product with an identical registration number;
6. Not a spray adjuvant (the VOC contribution of adjuvants is expected to be minimal and adjuvants are not part of ARB's inventory);
7. Does not contain the following as a primary active ingredient (the VOC emission potential of pesticide products containing these active ingredient is known):
 - 1,3-dichloropropene
 - Chloropicrin
 - Metam Sodium
 - Methyl Bromide
 - Metam Potassium
 - Sodium Chlorate
 - Sodium Hypochlorite

Data Requirement

Pursuant to this reevaluation, you are required to submit:

1. Data regarding the volatility potential of each of your products listed on Attachment A. The data must be obtained using the attached TGA study protocol entitled "*Estimation of Volatile Emission Potential of Pesticides by Thermogravimetry*" (Attachment B), or another method acceptable to DPR. You are required to submit the results of the study and all other information listed on the attached TGA Data Submission Form (Attachment C), along with copies of the thermograms from all pesticide analyses.

Note: A separate TGA Data Submission Form, along with the data and information listed on the form, must be submitted for each product being reevaluated.

Note: If you wish to use an alternate method to calculate the VOC emission potential of a pesticide product, a protocol for the method must first be submitted to, and approved by, DPR. The method must provide results that are comparable or more accurate than the TGA method.

2. An accurate statement of formula for each of your pesticide products included in the reevaluation. Please provide the information by filling out and submitting the third page of the "Application for Pesticide Registration." A copy of page three of the application form is attached for your use (Attachment D), or you may obtain a copy of the application form from DPR's website at <http://www.cdpr.ca.gov/docs/regforms/newappl/appmenu.htm>. A separate form should be completed and submitted for each product.

An accurate and complete statement of formula is essential for review of the TGA data. In order to obtain an accurate estimate of a product's VOC emission potential, the results of the TGA method must be corrected for the water content of the pesticide product and the percentage of any exempt compounds. Attachment E contains a list of exempt compounds. The VOC emission potential of your product will be corrected for the water content or any exempt chemical present in any trade name inert ingredient in the primary product if, DPR receives a statement of formula for the trade name inert. If you purchase the trade name inert ingredient from another party, the other party may submit the statement of formula for that inert ingredient directly to DPR along with a reference that the data are being submitted pursuant to the reevaluation of your product.

Distributor Registrations and Identical Products

You are not required to submit TGA data or a statement of formula for any product, which is a distributor registration (subregistration) of another pesticide product, provided the primary product is registered in California and the primary registrant is complying with the requirements of the reevaluation. You may comply with the requirements of the reevaluation by referencing the primary product for which your product is a subregistration.

If you have a pesticide product that is identical in formulation to another registered product, TGA data only needs to be provided on one of the products. However, statements of formula are required to be submitted for each product in order to show that the products are identical in formulation. Statements of formula do not need to be submitted for additional brand names.

Due Date

The data and a statement of formula for each product placed into reevaluation are required to be submitted to DPR by **December 31, 2005**.

Laboratories

The laboratory of your choice can conduct the TGA method. However, for your convenience, a list of laboratories that have expressed an interest in conducting TGA studies is attached (Attachment F). DPR is not recommending or endorsing any of these laboratories.

Availability of Documents Electronically

Copies of the TGA study protocol, TGA Data Submission Form, list of exempt compounds, and list of laboratories that have expressed an interest in conducting TGA studies are available on DPR's website at <<http://www.cdpr.ca.gov/docs/pur/vocproj/vocmenu.htm>>.

Appeal Process

If you feel that a product was incorrectly included in this reevaluation, or that the TGA methodology is not appropriate to a particular product due to inherent chemical properties, please inform DPR in writing within **60 days**. The VOC emission potential of consumer pesticides and pesticides intended for use as paints and wood preservatives are regulated by the California Air Resources Board, and therefore, exempt from this reevaluation. Please inform DPR, within **60 days**, if any of the products fit these categories. Please include with your submission all of the information that DPR needs to make a determination.

Mailing Address

Please address all correspondence regarding this reevaluation as follows:

VOC Data Call-In Reevaluation
Attn: Ann Prichard
Department of Pesticide Regulation
1001 I Street, P.O. Box 4015
Sacramento, California 95812-4015

Statement of Formula

Please note that the statement of formula that you submit pursuant to this reevaluation will be used for evaluation of the TGA data, and will not be used to update DPR's registration files on your product. If the formulation of your product has been changed from the statement of formula that you last filed with DPR, you must separately request DPR approval of that formulation change by submitting a request to the Pesticide Registration Branch. If you need to make such a submission, please contact your registration specialist for further information.

Contact Persons

If you have questions regarding the reevaluation process, please contact Ms. Ann Prichard, Senior Environmental Research Scientist, Pesticide Registration branch by e-mail at <aprichard@cdpr.ca.gov> or by telephone at (916) 324-3931. For information regarding the required data or the TGA protocol, please contact Mr. Randy Segawa, Senior Environmental Research Scientist, Environmental Monitoring Branch, by e-mail at <rsegawa@cdpr.ca.gov> or by telephone at (916) 324-4137.

Failure of a registrant to comply with the requirements of this reevaluation, may subject that registrant's product(s) to further regulatory actions.

Sincerely,

Original signed by Barry Cortez

2-16-05

Barry Cortez, Chief
Pesticide Registration Branch
(916) 445-4377

Date

Attachments

cc: Ms. Ann Prichard
Mr. Randy Segawa