



Mary-Ann Warmerdam
Director

Arnold Schwarzenegger
Governor

June 14, 2010

Brian L. Bret, Ph.D.
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, Indiana 46268-1054

Dear Dr. Bret:

Notice of Additional Data Requirements for Reevaluation of Sulfuryl Fluoride Products Intended For Structural Fumigation

On June 27, 2008, the Department of Pesticide Regulation (DPR) placed all sulfuryl fluoride products intended for structural fumigation into reevaluation. Pursuant to the reevaluation, DPR required registrants to submit: 1) a fumigation worker exposure study (area air monitoring and personal air monitoring); and, 2) a residential post-application monitoring study (instantaneous and continuous air measurements). On October 14, 2009, DPR expanded its reevaluation data requirements to include comparative monitoring data for multiple-story multiple dwelling units.

Sulfuryl fluoride product labels require the use of chloropicrin as a warning agent when fumigating homes. Chloropicrin is a toxic gas that causes eye and respiratory irritation at low levels. Based on this information, DPR is further expanding its sulfuryl fluoride reevaluation data requirements to require registrants to monitor for both sulfuryl fluoride and chloropicrin in both one-story single family residences and multiple-story multiple dwelling residences. The enclosed June 3, 2010 Worker Health and Safety memorandum addresses DPR's reasons for requiring both sulfuryl fluoride and chloropicrin monitoring.

On September 28, 2008, Dow AgroSciences LLC submitted monitoring data based on the structural fumigation of a one-story single family residence entitled, "Sulfuryl Fluoride and Chloropicrin Concentrations in Air During Fumigation, Aeration and Post-Clearance of Residential Structures." DPR is still in the process of evaluating the data.



Pursuant to this reevaluation, Dow AgroSciences LLC is hereby required to submit the following:

1. Within **60 days** from the date of this letter, monitoring data from a study conducted with multiple-story multiple dwelling units that fulfills the requirements of this reevaluation as identified in items 2 and 3. If you conducted the study prior to initiation of the reevaluation, you do not need to submit protocol(s) as identified below.
2. Within **90 days** from the date of this letter, submit a study protocol for a sulfuryl fluoride worker exposure monitoring study in multiple-story multiple dwelling residential units (e.g., condominiums, apartments) as delineated in Table 1. The exposure study must be designed to monitor inhalation exposure to both sulfuryl fluoride and chloropicrin. Monitoring shall be conducted during aeration, untarping, and reentry of multiple dwelling structures treated at maximum label rates. Monitoring shall include both area air monitoring and personal air monitoring. DPR will establish a date for submission of the final report, once we approve the study protocol.

Table 1. Fumigant worker exposure to sulfuryl fluoride and chloropicrin data requirements for multiple-story multiple dwelling units.

Type of data required	Stage of Structural Fumigation			Guideline reference
	Aeration	Untarping	Reentry	
Area air monitoring	Required	Required	Required	OPPTS 875.1300, 875.1400
Personal air monitoring	Required	Required	Required	OPPTS 875.1300, 875.1400

3. Within **90 days** from the date of this letter, submit a study protocol for a sulfuryl fluoride residential post-application monitoring study in multiple-story multiple dwelling residential units as delineated in Table 2. Monitoring of sulfuryl fluoride and chloropicrin shall include both instantaneous and continuous air measurements within multiple dwelling structures. Monitoring of sulfuryl fluoride and chloropicrin shall continue until measurements from both sampling methods are below the level of detection. The structure(s) shall be treated with sulfuryl fluoride at the maximum application rate on the product label. DPR will establish a date for submission of the final report, once we approve the study protocol.

Dr. Brian Bret
June 14, 2010
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Table 2. Residential post-application sulfuryl fluoride and chloropicrin monitoring requirements for multiple-story multiple dwelling units.

Type of data required	Maximum Application Rate	Guideline reference
Instantaneous air measurements	Required	OPPTS 875.2500
Continuous air measurements	Required	OPPTS 875.2500

If you have any questions regarding the reevaluation process, please contact Ms. Denise Alder by e-mail at <dalder@cdpr.ca.gov> or by telephone at 916-324-3522. If you have any questions regarding the required data, please contact Ms. Linda O'Connell by e-mail at <loconnell@cdpr.ca.gov> or by telephone at 916-445-1717.

Sincerely,

Original signed by

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

Enclosure

cc: Ms. Linda O'Connell, Worker Health and Safety Branch, Sr. Environmental Scientist (w/ Enclosure)
Ms. Denise Alder, Registration Branch, Staff Environmental Scientist (w/ Enclosure)
Ms. Brandi Martin, Registration Branch, Environmental Scientist (w/ Enclosure)



Mary-Ann Warmerdam
Director

Arnold Schwarzenegger
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June 14, 2010

Ms. Luz G. Chan
Drexel Chemical Company
P.O. Box 13327
Memphis, Tennessee 38113-0327

Dear Ms. Chan:

Notice of Additional Data Requirements for Reevaluation of Sulfuryl Fluoride Products Intended For Structural Fumigation

On June 27, 2008, the Department of Pesticide Regulation (DPR) placed all sulfuryl fluoride products intended for structural fumigation into reevaluation. Pursuant to the reevaluation, DPR required registrants to submit: 1) a fumigation worker exposure study (area air monitoring and personal air monitoring); and, 2) a residential post-application monitoring study (instantaneous and continuous air measurements). On October 14, 2009, DPR expanded its reevaluation data requirements to include comparative monitoring data for multiple-story multiple dwelling units.

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On February 16, 2010 your regulatory consultant, Ms. Janelle Kay, submitted a protocol entitled "Airborne Residues of Sulfuryl Fluoride using a Modified Aeration Procedure following structural Fumigation." On April 12, 2010, DPR found this combined protocol to be sufficient. However, in identifying its data requirements, DPR neglected to specify that registrants must monitor for both sulfuryl fluoride and chloropicrin. Your company is required to submit a revised study protocol to DPR as delineated below.



Pursuant to this reevaluation, Ensystex II, Inc. is hereby required to submit the following:

1. Within **60 days** from the date of this letter, monitoring data from a study conducted with single-story residence and multiple-story multiple dwelling units that fulfill the requirements of this reevaluation as identified in items 2 and 3. If you conducted the study prior to initiation of the reevaluation, you do not need to submit protocol(s) as identified below. As an alternative to conducting your own monitoring study, you may choose to collaborate with Dow AgroSciences, LLC. If you plan to collaborate with Dow AgroSciences, LLC, instead of conducting your own monitoring study, you must also inform DPR of that fact in writing by **August 12, 2010**.

2. Within **90 days** from the date of this letter, submit a study protocol for a sulfuryl fluoride worker exposure monitoring study in single-story residence and multiple-story multiple dwelling residential units (e.g., condominiums, apartments) as delineated in Table 1. The exposure study must be designed to monitor inhalation exposure to both sulfuryl fluoride and chloropicrin. Monitoring shall be conducted during aeration, untarping, and reentry of multiple dwelling structures treated at maximum label rates. Monitoring shall include both area air monitoring and personal air monitoring. DPR will establish a date for submission of the final report, once we approve the study protocol.

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Table 2. Residential post-application sulfuryl fluoride and chloropicrin monitoring requirements for multiple-story multiple dwelling units.

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Sincerely,

Original signed by

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

Enclosure

cc: Ms. Janelle Kay, Pyxis Regulatory Consulting, Inc. (w/Enclosure)
Ms. Linda O'Connell, Worker Health and Safety Branch, Sr. Environmental Scientist (w/ Enclosure)
Ms. Denise Alder, Registration Branch, Staff Environmental Scientist (w/ Enclosure)
Ms. Brandi Martin, Registration Branch, Environmental Scientist (w/ Enclosure)



Mary-Ann Warmerdam
Director

Arnold Schwarzenegger
Governor

June 14, 2010

Mr. Ken Kendall
Ensystem II, Inc.
P.O. Box 87329
Fayetteville, North Carolina 28304-7329

Dear Mr. Kendall:

Notice of Additional Data Requirements for Reevaluation of Sulfuryl Fluoride Products Intended For Structural Fumigation

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