



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 21 2009

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

Thank you for your recent letters of May 6, June 4, and June 10, 2009 regarding concerns about phenothrin-based products. In your letters, you have requested that the Agency take action against synthetic pyrethroid-based flea and tick topical spot-on products. EPA is responsible for regulating pesticide products in the United States and ensuring that they perform their intended functions without posing unreasonable risks to humans, animals, or the environment; therefore, on behalf of the Agency, I appreciate your message and want to address your concerns.

We are saddened to hear of the death of your dog. I've discussed the information you provided to us with the veterinarians who work in our office. Unfortunately, it was difficult for them to make a definitive determination without observing the situation and your pet. Because of situations like yours, and because of recent increases in the number of reported incidents for the pet products that EPA regulates, we issued the April 2009 advisory statement on spot-on products that you mention in your letter. In addition to the advisory statement, we are intensifying our evaluation of spot-on pesticide products for flea and tick control for pets.

As part of the intensive evaluation that the Agency is conducting, the following activities are taking place:

- we have requested and expect to receive additional information from all registrants of pesticide spot-on products (i.e., pesticide manufacturers) on the pet health incidents reported;
- we will expeditiously and thoroughly review the additional information submitted to us by the registrants;
- we will be reviewing the domestic animal safety data submitted or cited for all registered pet spot-on products;
- we will be reviewing our domestic animal safety guidelines to reassess whether those studies accurately predict safety to pets; and
- we have established a team of veterinarians who work in our office who will be thoroughly analyzing all of the information discussed above.

After the intensive evaluation is complete, we will take appropriate regulatory action to address concerns identified with these products. We share your concerns about the number of incidents with these products, and we are committed to addressing this issue.

In addition, we have established a partnership with the National Pesticide Information Center (NPIC) to allow veterinarians to directly report incidents to us through a portal. This will help improve the quality of all animal incident data received by the Agency.

We plan to continue to update the following Web site with information on our regulatory activities related to pet products: <http://www.epa.gov/pesticides/health/flea-tick-control.html>. For example, and as you requested, we have updated the list of products provided on the Web site to include all spot-on products. Also, we have posted to that site minutes from a May 5, 2009, meeting with registrants of spot-on pet products and we intend to post the Agency's workplan regarding pet products and pet incidents shortly.

We appreciate the time and effort you put into your letters and have provided detailed responses to each of the topics you raised in the sections below. Again, thank you for contacting us.

### **The potential for synergistic effects between methoprene and phenothrin**

In your letter you state that combining phenothrin and s-methoprene dramatically increases the total toxicity of phenothrin. Phenothrin and methoprene belong to two separate classes of insecticides that affect insects in different ways. They are more effective together because the insect growth regulator methoprene kills insect (e.g., flea) larvae while the pyrethroid insecticide phenothrin kills adult insects.

Current data do not indicate that the combination of methoprene and phenothrin increases the total toxicity. However, the Agency will be closely monitoring the incident data and if any clustering of incidents or patterns of incident reports indicating that synergistic effects may be contributing factors to a potential adverse relationship, we will take appropriate regulatory action.

### **National Pesticide Information Center (NPIC) reports**

In your letter, you also cite data from the National Pesticide Information Center (NPIC) about incidents, specifically the relative number of deaths associated with various ingredients. We are looking into this information and will include NPIC data in our overall evaluation of pet incidents. However, the data cannot be used as presented, since what is shown in the NPIC reports does not indicate which of the active ingredients fall into the probability classes of definite or probable (the table lists all the ingredients and incident totals, rather than just the ones that fall into those classes). The Agency must first evaluate the additional information that we'll be receiving from the registrants on all reported incidents. If the Agency observes that any individual active ingredient is causing a disproportionate, unexplained number of incidents, we will take appropriate regulatory action.

## **Status of the phenothrin database**

You express concern about the lack of certain data for phenothrin, including dermal absorption and neurotoxicity data. The toxicity database for phenothrin is nearly complete, but does lack certain studies that are important for a full evaluation of the potential hazard. The Agency was able to complete its risk assessment for human health by taking into account the uncertainty associated with the missing data. This was accomplished by requiring a large margin between the predicted maximum exposure and adverse effects observed in the available toxicity testing. Maximum anticipated levels of exposure from combined dietary and residential sources are less than 1/1000<sup>th</sup> the level that resulted in any adverse effect seen in the battery of toxicology tests using laboratory animals. The use of safety margins in our risk assessments has been repeatedly validated over the years and has been externally peer reviewed by expert Science Advisory Committees. Nevertheless, our normal procedure is to require registrants to submit data so we can confirm whether risk assessment conclusions are adequately protective of human health.

You state in your letter that you believe that the Agency's acceptance of safety information generated by registrants and manufacturers of pesticide products creates a conflict of interest and, as such, is not in the interest of consumers and citizens. Although we understand your concerns, the regulatory system is developed with very strict requirements in place for the conducting and reporting of pesticide studies, and the study reports that are provided to the Agency are reviewed carefully in several phases by several levels of EPA scientists to ensure sound scientific bases for our risk assessments.

The EPA Office of Prevention, Pesticides and Toxic Substances provides Test Guidelines on how to conduct studies to fulfill the data requirements set forth in the regulations in 40 Code of Federal Regulations (CFR) Part 158. See the following Web site for additional information on the Guidelines: <http://www.epa.gov/opptsfrs/home/testmeth.htm>. The Guidelines describe in detail how each toxicity study should be conducted and reported. In addition, testing laboratories should follow Good Laboratory Practice Standards (GLPS) as defined in the 40 CFR Part 160. As part of GLPS requirements, each laboratory is required to have an independent quality assurance officer, to use qualified people, to document that equipment is working properly, and to maintain records of results as well as the internal audits.

EPA's GLPS compliance monitoring program inspects laboratories to ensure the quality and integrity of test data submitted to the Agency in support of pesticide product registrations. Lists of inspected facilities and GLPS violations are available on our Web site at the following address: <http://www.epa.gov/compliance/monitoring/programs/fifra/glp.html>. The consequences of providing false or misleading data are substantial; violations of GLPS may constitute unlawful acts under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). And finally, toxicity studies are very expensive. Because pesticide manufacturers benefit financially from sale of their products, and considering the checks and balances in place to ensure the quality and integrity of the data, it is appropriate for the manufacturer to pay for the required studies.

**Government use of information from American Society for the Prevention of Cruelty to Animals (ASPCA) Animal Poison Control Center (APCC).**

You state in your June 4, 2009, letter that you have concerns that if the ASPCA does not report incidents to the registrants, then these incidents are not reported to EPA. You suggest that it is a conflict of interest for ASPCA to take money from pesticide manufacturers to manage the adverse incident claims and provide advice on legal cases.

Section 6(a)(2) of FIFRA requires each individual pesticide product registrant to submit adverse effects information about their products to the EPA. The Agency has published regulations and guidance documents that provide registrants details on what, when and how registrants must report this information. For reference, those regulations and guidance documents are available at the following Web site: <http://www.epa.gov/pesticides/fifra6a2/>.

In the case of registrants who use third party organizations such as ASPCA/APCC as an agent in collecting incident reports, the information that the agent receives is treated as if the registrant itself receives the data. Therefore, if the third party fails to report the data to the Agency, the registrant itself is responsible. However, if a third party is collecting information independently and selling it to registrants, a registrant is only obliged to report what it actually knows. The Agency has no authority to require that ASPCA/APCC submit the information that it independently obtains on incidents either to the registrants or to us.

Please be assured that the Agency will ultimately make an independent evaluation of the safety of the pet spot-on products and an independent decision regarding what regulatory actions are most appropriate.

**Hartz Product Cancellation**

As you stated in your letter, in 2005, EPA issued a cancellation order for certain Hartz products (see *Federal Register* Notice 70 FR 67171, published on November 4, 2005). We want to clarify that the cancellation order resulted from an agreement reached between Hartz and EPA after many discussions concerning certain products that may have caused adverse effects in cats and kittens. In 2005, at EPA's insistence, Hartz Mountain Corp. agreed to cancel uses of several flea and tick products containing phenothrin and s-methoprene because of concerns that the products may be associated with a range of adverse reactions on cats and kittens. EPA issued its 2005 cancellation order in response to Hartz's request to voluntarily cancel these products.

After completing its independent evaluation of all spot-on products, EPA plans to have similar discussions with all registrants of products the Agency determines may be causing unreasonable adverse effects.

## Conclusion

In your June 10, 2009, letter to Jim Jones, you suggest that all pet products containing neurotoxins are unsafe for use. As stated above, EPA is responsible for regulating all pesticide products in the United States and ensuring that they perform their intended functions without posing unreasonable risks to humans, animals, or the environment. In making this determination, the Agency considers both the toxicity of the products and the anticipated exposure resulting from use of the products as directed. The Agency applies the same level of scrutiny to all pesticide products.

In its evaluation of all pet spot-on products, the Agency will be considering all incident reports received on pet spot-on products along with public comments and concerns, and all other relevant information that is available to us, such as public literature, guideline studies and past Agency reviews. The Agency's assessment of the safety of these products will be thorough and **will consider information from all available sources**. Please be assured that the Agency will ultimately make an independent evaluation of the safety of the pet spot-on products and will implement any regulatory decisions necessary to ensure that the pet spot-on products perform their intended functions without posing unreasonable risks to humans, animals, or the environment.

Again, thank you for contacting us. You have my sincere condolences about the loss of your pet. Please write again if you have additional questions.

Sincerely,

A handwritten signature in black ink that reads "Debra Edwards". The signature is fluid and cursive, with the first name "Debra" and last name "Edwards" clearly legible.

Debra Edwards, Ph.D., Director  
Office of Pesticide Programs