

# Bed Bug Policy

Regulatory Decisions, Congressional Intervention and the Rise of Bed Bugs



By Nichelle Harriott

Bed bugs, having rebounded in significant numbers, are reported in every state in the U.S. In November 2010, U.S. Representatives G.K. Butterfield (D-NC) and Don Young (R-AK) sponsored a Congressional Bed Bug Forum to solicit recommendations from professionals, researchers and other stakeholders, including federal agencies, to strengthen proposed legislation aimed at providing additional resources to prevent and manage bed bug infestation at lodging facilities and public housing. This new bill, *Don't Let the Bed Bugs Bite Act* (H.R. 2248) is set to be reintroduced in the new Congress.

Federal interest in the bed bug epidemic officially began when EPA convened the first ever *National Bed Bug Summit* in April 2009 to hear from scientists, state and local officials, pest control operators and the general public on how to tackle the resurgence of the blood sucking insects. From this meeting, stakeholders submitted recommendations to the agency for combating the bedbug resurgence, some of which included: (1) formulating and mandating integrated pest management (IPM) strategies and certification for bed bug control, (2) creating tracking systems/clearinghouse for data, (3) regulations for addressing recycled/refurbished mattresses and dealing with infested items, (4) increasing consumer education and the use of public service announcements on TV, web, radio, billboard, hotlines, and (5) standardization of pest control operator training.

Given that bed bugs are showing resistance to chemical treatments (see page 20), which means that conventional chemical-intensive approaches are proving less and less efficacious, the pest control industry is being forced to utilize non-chemical alternatives. In this context, pest managers are employing approaches that have long been advocated as integral to integrated pest management (IPM), such as (i) heat treatment, (ii) sealing of cracks and crevices, entryways, and other exclusion techniques, (iii) removing items of harborage, and (iv) least-toxic chemicals, such as boric acid. Widespread agreement is developing that non-chemical practices are the best solution for bed bug control.

## Emergency Request For Propoxur

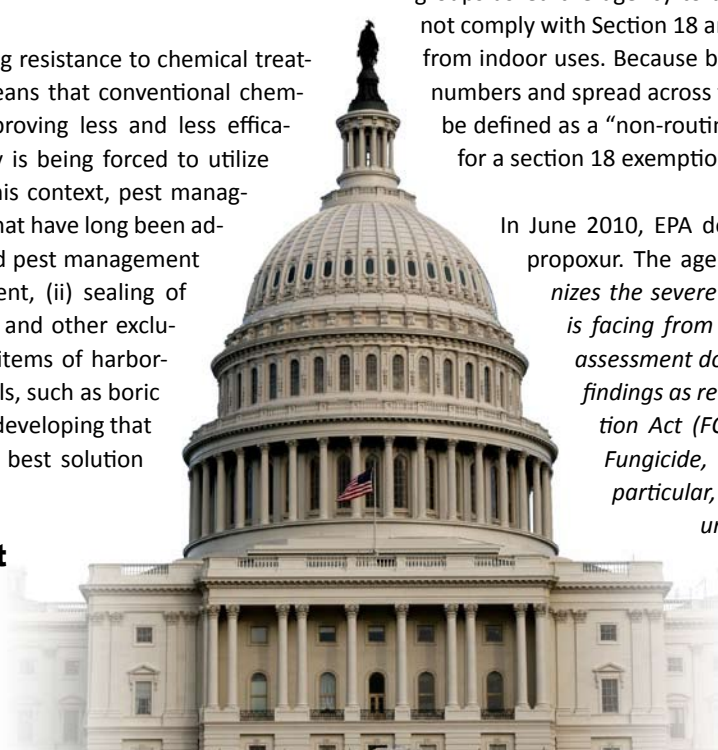
In the fall of 2009, the Ohio Department of Agriculture requested EPA to allow the

indoor residential uses of propoxur (banned for use around children) under the emergency exemption provision (Section 18) of the *Federal Insecticide, Fungicide and Rodenticide Act* (FIFRA) for use in the fight against bed bugs. According to FIFRA, an emergency condition is defined as “an urgent, non-routine situation...” Section 18 of FIFRA authorizes the agency to allow a new use of a registered pesticide or the use of a pesticide whose registration is pending (and making progress toward registration) for a limited time if the agency determines that an emergency condition exists. EPA must perform a multi-disciplinary evaluation of the request, including human, occupational and environmental risks. The law also states that the agency must deny an exemption request if the pesticide does not meet safety standards, or if emergency criteria are not met. The exemption should not encourage nor allow the use of pesticides that have been cancelled or voluntarily withdrawn. A major concern with Section 18 exemptions is the effect that exempt chemical uses will have on aggregate pesticide exposures. These uses go unevaluated and are not part of the risk assessment process. Without strict adherence to Section 18 criteria, allowance of unregistered, cancelled, or withdrawn pesticide uses and unregistered pesticides risks a public health problem.



Beyond Pesticides and 13 other environmental and public health groups asked the agency to deny this request because it does not comply with Section 18 and presents unacceptable hazards from indoor uses. Because bed bugs have rapidly increased in numbers and spread across the country, they certainly cannot be defined as a “non-routine” situation and does not qualify for a section 18 exemption.

In June 2010, EPA denied the section 18 request for propoxur. The agency stated, “Although EPA recognizes the severe and urgent challenges that Ohio is facing from bed bugs, the results of the risk assessment do not support the necessary safety findings as required by the Food Quality Protection Act (FQPA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In particular, the requested use presents an unacceptable risk to children who might be exposed to propoxur in and around rooms treated for bed bugs. EPA is required to make a safety finding in support of newly requested pesticide uses, including those that



## The Role of Government Agencies in Addressing the Bed Bug Epidemic

- **Environmental Protection Agency:** EPA is working to ensure that pest management professionals and the public have access to the latest information on effective bed bug control tools. EPA is also working to educate the general public, pest professionals, and public health officials about bed bug biology and IPM, which is critical to long-term control. [www.epa.gov/pesticides/bedbugs](http://www.epa.gov/pesticides/bedbugs).
- **Centers for Disease Control and Prevention:** CDC is partnering with experts in the areas of medicine, entomology, epidemiology and environmental toxicology to better understand the resurgence of bed bugs and the methods and tools that are needed for effective control. [www.cdc.gov/nceh/ehs/Topics/bedbugs.htm](http://www.cdc.gov/nceh/ehs/Topics/bedbugs.htm)
- **U.S. Department of Agriculture:** USDA Agricultural Research Service is researching new and existing chemical methods for controlling bedbugs, studying their behavior and life cycle.
- **Department of Housing and Urban Development:** HUD is funding research on bed bug monitoring and control in low-income, multi-family housing, along with educating public housing authorities and other housing industry groups about bed bug identification and control. [www.hud.gov/offices/pih/programs/ph/phecc/pestmang.cfm](http://www.hud.gov/offices/pih/programs/ph/phecc/pestmang.cfm)
- **Local Health Departments:** Health departments serve on the front lines, providing information on prevention and control of bed bugs through various programs to the public and private sector.



are sought on an emergency basis, such as this use of propoxur on bed bugs. Propoxur, along with other members of its chemical class [carbamate], is known to cause nervous system effects. The Agency's health review for its use on bed bugs suggests that children entering and using rooms that have been treated may be at risk of experiencing nervous system effects. The specific exposure scenarios that are of most concern involve inhalation risk and also hand-to-mouth behaviors on the part of children."

To date, EPA, the Centers for Disease Control and Prevention (CDC), states, and other stakeholders including pest control operators, local health departments, the U.S. Department of Housing and Urban Development (HUD), and academia are facilitating communications and working to expand the knowledge base among agencies and programs that may have a role in reducing bed bug populations.

There are currently no indoor residential (crack and crevice) spray uses for propoxur. It is evident based on independent data (see ChemWatch factsheet) that propoxur use, in the form of liquid/sprays, poses significant exposure risks. In 2007, before the completion of the cumulative risk assessment of N-methyl carbamates, the registrant voluntarily cancelled propoxur indoor spray uses for cracks and crevices, which may result in non-occupational exposure for children. The remaining indoor uses include bait traps, pastes, and impregnated shelf paper.

Prior to 2007, EPA had issued a *Reregistration Eligibility Decision* (RED) for propoxur in 1997 which re-authorized certain uses of propoxur after Bayer AG voluntary cancelled and amended labels

deleting use of ready-to-use liquids with trigger pump sprayers. This "eliminated those uses posing the greatest concern" (i.e. flea dips and shampoos for pets, and total-release fogger products), and came after several internal agency decisions. In 1988, EPA considered initiating a Special Review for propoxur in light of potential carcinogenic risks to pest control operators and the general public. In 1989, Bayer AG decided not to support the outdoor uses of propoxur on ornamentals, on lawns/turf, and for mosquito control- uses which posed significant exposure risks. The end-use manufacturers followed suit, and these uses were removed from the label. As a result, after evaluating the exposure and carcinogenicity data in 1995, the agency decided not to perform the review. The remaining outdoor uses of propoxur include residential uses around home foundations, sidewalks, patios, and driveways, spot treatments to wasp nests and ant hills, insecticidal tape on boat mooring lines and in gypsy moth and medfly traps.

In November 2007, the Natural Resources Defense Council (NRDC) submitted a petition to EPA to cancel the pet collar uses of propoxur and supplemented that petition on April 2009. EPA responded that it was evaluating the information regarding pet collar exposures and intends to respond to the petition. The agency also asserted that it recognizes that the registration review process is not a substitute for the agency's consideration of NRDC's petition to cancel propoxur pet collar uses. EPA anticipates responding to the petition prior to the completion of registration review.

EPA began another registration review of propoxur in 2009 that is slated to completed in 2015. For more information on propoxur, see the *Pesticide Gateway*, [www.beyondpesticides.org/gateway](http://www.beyondpesticides.org/gateway).