

February 25, 2013

Environment Committee
Connecticut General Assembly
Room 3200, Legislative Office Building
Hartford, CT 06106

Dear Senator Meyer, Representative Gentile, Senator Chapin, Representative Shaban and members of the Environment Committee,

I am writing, as a representative of Central Life Sciences, to express our opposition to HB 6438, which would restrict the use of certain products used for mosquito control in coastal areas of the state. I respectfully request you to vote no in the interest of the public health of Connecticut citizens.

HB6438, if passed, will severely restrict the use of methoprene, to the extent that it will not be a useful tool to protect the spread of disease by effectively controlling mosquitoes. The motivation for this legislation appears to be the misperception that methoprene is a factor in the lobster die-off in the waters of Long Island Sound.

To briefly review the history, after the lobster die-off during the Fall of 1999, researchers and government agencies came together under the oversight of the Atlantic States Marine Fisheries Commission to conduct a comprehensive research initiative investigating the lobster mortality event. The research concluded that unusually high water temperatures and disease – not methoprene – were responsible for the lobster die-off. There has not been any subsequent research to connect lobster death with the use of methoprene.

Methoprene is used watery areas where mosquitoes lay eggs and especially in catch basins, a prime breeding area for mosquitoes. It is broken down rapidly by sunlight and microbes. Research shows that chemical concentrations outside of catch basins are so diluted that it is nearly impossible to detect the molecule at the outfall of the drain, much less impact lobsters in the open waters of Long Island Sound. This is verified by monitoring studies conducted by government agencies and academic researchers which show that methoprene when detected is confined to the local treatment area. In fact, concentrations that have been reported to be toxic to lobsters in a laboratory studies cannot be found in the environment.

Monitoring the surface waters of Long Island Sound (LIS) as part of the NY Sea Grant's Lobster Research Initiative showed no methoprene in LIS in 2003 when it was actively used in storm drains surrounding the Western Sound.

In the Ontario Hamilton area, the Canadian government conducted a three-year study to monitor methoprene concentrations in the waters surrounding areas where methoprene based mosquito control programs were implemented. Samples were taken from catch basins and receiving waters (streams, rivers and harbors) immediately after storm events from 2003 to 2005. Extremely low concentrations of methoprene were detected in only two of 51 samples over the three-year period in the receiving waters. In Hamilton Harbor, no methoprene was found.

In response to the discovery of West Nile virus, Beaufort County, SC, a coastal county with more water acreage than land, initiated a treatment regime with methoprene. To address concerns about the harm to shrimp, crabs and oysters, Beaufort County Mosquito Control initiated a study to determine the potential for catch basins treated with methoprene to result in methoprene concentrations sufficient to disrupt the development of non-target species. Methoprene was found in extremely low concentrations in four of 65 post-treatment water samples. The researchers concluded “Even with conditions believed to represent a worse-case scenario, catch basin treatment . . . did not result in methoprene concentrations sufficient to adversely impact non-target species. Further as methoprene degrades rapidly in the environment, accumulation over time to toxic concentrations is unlikely. “

The Connecticut Department of Energy and Environmental Protection released a report in July 2012 stating that methoprene and resmethrin had been found in a single pooled sample of lobster tissue collected from a lobsterman in September 2011. This single finding has been turned by the popular press into a cause-and-effect relationship of weak and diseased lobsters being affected by methoprene.

Full details about the analytical methods and research procedures are not publically available, so it is not possible to comprehensively comment on the initial finding. Based on the limited materials given to Central Life Sciences, this observation is puzzling because it is not consistent with other published research where when methoprene was found in lobsters in laboratory studies it was discovered in several organs not just in one organ. It is important to take into account that, the presence of methoprene (if in fact it was methoprene), or in fact any chemical, does not necessarily indicate a negative effect.

It is also important to note that these lobsters were collected following Tropical Storms Irene and Lee. Water temperatures in the area were reported to be more than 2.5 degrees above the tolerance limit shown to be stressful to lobsters in LIS. As concluded by the Sea Grant research, the high temperature contributes to disease pressure and lobster deaths. To propose legislation severely restricting use of methoprene based on the findings of the analysis of a single pooled sample of lobster tissue will deprive the community of a valuable tool for control of mosquitoes and thus, mosquito-borne disease.

Finally, it can be asked why there is a focus on methoprene as the cause of the die-off of lobsters in LIS when there are other, more widely used chemicals that have been found in Long Island Sound lobsters and are known to negatively affect their health and development. For example, alkylphenols are a class of compounds used in plastics, detergents and paints, which, unlike methoprene, are widely used and released in the environment and have been found in LIS lobsters.

In fact, Dr. Hans Laufer a research professor at UConn and a leading authority on lobsters in the Sound has published numerous articles showing the alkylphenols cause adverse effects in lobster, most recently presenting his research at the November 2012 Sea Grant Symposium.

Let me conclude by saying that methoprene is a valuable tool for the control of mosquitoes and this bill unnecessarily restricts its use. Many years of research have not shown any cause-and-effect relationship between lobster health and methoprene in the environment.

As you consider this legislation, please consider a vast body of sound science that time and time again has shown methoprene to be an effective and safe tool for preventive mosquito control and disease prevention efforts. It is with this body of science that I respectfully request your no vote on HB 6438.

Thank you for your consideration. I welcome your contact if you have any questions concerning methoprene, this submitted testimony or this legislation.

Sincerely,

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Central Life Sciences