

From: [Tim Waters](#)
To: [Jennings, Jonathan \(ECY\)](#)
Subject: Ecology Aquatic Mosquito Control NPDES Draft General Permit
Date: Friday, March 12, 2010 12:26:50 PM

March 12, 2010

Jonathan Jennings
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Mr. Jennings,

I am writing this letter to state my opinion regarding the Ecology Aquatic Mosquito Control NPDES Draft General Permit. My opinion is based on my personal experience working for the Columbia Mosquito Control District in Burbank, WA for five years along my educational and professional background in entomology and integrated pest management.

It could be risky to attempt to discern vector and nuisance mosquito populations in areas where humans reside. It is important to remember how quickly an insect can transmit a virus and that by the time a population of mosquitoes has proven to be carrying a virus it is likely that humans and other animals have already been fed upon by that population. Additionally, nuisance mosquitoes can significantly diminish quality of life for residents in rural communities by limiting outdoor recreational opportunities. When left uncontrolled, nuisance and vector mosquitoes can significantly reduce property values and economic activity in rural communities that could be realized from outdoor recreational activities. It would be desirable for mosquito control districts that have approved integrated pest management plans to have the ability to use their discretion to control adult mosquito populations in their regions. This will help enhance resident's quality of life and mitigate the spread of mosquito borne virus.

Another area of concern regarding the Ecology Aquatic Mosquito Control NPDES Draft General Permit is the language that addresses which insecticides can be used for adult mosquito control. Pyrethroids are inexpensive broad range insecticides with a history of resistance development by several insects. Once a population of insects becomes resistant to an insecticide, it becomes impossible to control the population with that insecticide, and usually resistance is realized in other insecticides in that same insecticide class. It is important that other classes of insecticides are used periodically, especially on insect species with multiple generations per year where resistance is more likely to develop. Organophosphates such as malathion and dibrom could offer adult insect control and reduce the likelihood of the development of resistance by mosquitoes to pyrethroid insecticides.

In rural communities such as Burbank, WA the quality of life would be greatly diminished for residents without an effective mosquito abatement district. It is imperative that mosquito control districts have the tools and flexibility to use their judgment and experience to control both vector and nuisance mosquitoes in their respective districts to retain the health and quality of life for their residents.

If you should have any questions or need clarification, please feel free to contact me.

Tim Waters, Ph D
1088 W. Sunset Dr.
Burbank, WA 99323
509 554-0152
twaters@wsu.edu