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September 28, 2009

Teung Chin  
USDA/ARS/OPMP  
1400 Independence Avenue, SW  
Room 3871-South Bldg., Mail Stop 0315  
Washington, DC 20250-3191

Dear Teung,

This letter is an informal response to your inquiry regarding label mandated buffer zones for pesticide products containing chlorpyrifos, diazinon and malathion.

I have had a chance to briefly review the proposed buffer zones and query the California database for pesticide use in the counties that have salmonid bearing waterways. I have reviewed the various web pages relating to locations of these waterways and have concluded that these proposed buffer zones will have a significant impact on western producers. The hard data that I will cite below is from California, but the concerns should represent Oregon, Idaho and Washington, as well. I must caution you that California is the only state that has 100% use reporting, so other states cannot provide detail to the application level that California can. California data are available to EPA or any other agency. I would expect that EPA and USDA will work with agencies that have the expertise to provide habitat information to correlate all the data. As a Regional IPM Center, we can provide pesticide usage data and some impacts data. We do not have expertise to identify endangered species habitat or overlay other data on these maps.

When one looks at the maps of affected waterways, it is immediately clear that vast acreages of farmland are adjacent to them. Many of these are artificial waterways such as canals, irrigation ditches and drains that eventually could flow into natural creeks and/or rivers. A minimum buffer zone for ground applications of 100 feet means that 3 acres of crop immediately adjacent to the waterway cannot be treated with one of these materials for every ¼ mile of border. A 1000 foot buffer zone creates 30 acres of untreatable crop for each ¼ mile of border. This is not workable for most areas. It essentially means a ban of the use of chlorpyrifos, diazinon and malathion.

I fully understand that the label is the law and can be enforceable. However, the practicality of using the label to mandate buffer zones is questionable. The grower will need to first determine his field location in relation to a critical waterway. Then he will need to determine the width and depth of the waterway and finally measure the buffer zone. This is all to be done on-line? There are a number of questions that immediately come to my mind. First, when do you determine the width and depth?

Many canals and drains do not have continual or consistent levels of water. There needs to be more clarification on how to make this determination. If the canal is dry, is it permissible to spray? If so, how long after must it remain dry? What if the canal is 20 feet wide and 10 feet deep today, but dries in a week?

I don't think many enforcement agencies (I have not contacted DPR or the California County Agricultural commissioners) will be pleased to see another unfunded enforcement activity.

I am also concerned that if this mechanism is implemented it set a precedence that will be used on any product that affects an endangered species. The species may or may not be near water. Soon we will have buffers for every endangered species that will effectively eliminate the use of many pesticides.

Below are some use figures taken from the California Pesticide Use Reporting database. I have attached the Excel spreadsheets with all the data.

Active Ingredient	Pounds AI Used	Number of Applications	Number of Crops	Percent Ground Applied	Percent Aerially Applied
Chlorpyrifos	485,917	14,679	40	93.5	6.5
Diazinon	237,496	25,972	48	96.2	3.8
Malathion	258,701	10,935	65	84.2	15.8

It seems to me much more information is needed to effectively address the issue of endangered species protection. There are many variables that will make it difficult for a grower or applicator to make good decisions.

If you have any further questions, please contact me.

Sincerely,



Rick Melnicoe, Director  
Western IPM Center