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SUBJECT: PUBLIC COMMENTS ON PROPOSED REVISIONS TO THE EXPERIMENTAL USE PERMIT ACREAGE LIMIT EXEMPTION (Revision to 40 CFR 172.3(c)(1))

I strongly encourage EPA to amend the allowable exemptions from the requirements of a federal experimental use permit for small-scale trials (e.g. < 1 surface aquatic acre/ pest/state year and < 10 acre/pest/state/year for terrestrial) found in 40 CFR 172.3(c)(1) so researchers can adequately evaluate pesticide performance. We suggest that the acreage limitation be increased to < 10 surface aquatic acres/pest/state/year and < 100 terrestrial acres/pest/state/year when researching new uses of currently registered section 3 products to allow the development of more reliable data.

As a research scientist with Washington State University at a research station in coastal SW Washington, I have spent a large part of my time during the last 18 years conducting pest management research in aquatic environments. This work has been conducted in lakes, estuaries, ponds, drainage ditches and irrigation canals for an array of aquatic invasive pests. For each site and product I have obtained state EUP permits that allow me to conduct small-scale (<1 acre) trials. During the *initial* phase of research these small-scale EUPs are normally adequate as they mainly involve product screening. For

example, during the first year of a trial I will normally obtain several dozen state EUPs and test products on a very small scale (e.g. using 1/100th of an acre per treatment).

During subsequent years of development, the scope and size of research trials were expanded, whereby requiring nearly the full 1-acre allowance (e.g. 20' x 60' plots, 4 replications, 3 timings, 3 sites). Once we have identified an active ingredient that shows good efficacy in these types of replicated trials, we need to obtain realistic environmental fate and persistence data and efficacy data using industry standard application methods. This usually involves aerial methods. Neither of these two types of data can be easily collected in sites of less than 1 acre. Consequently the projects are often put on hold or done over numerous years or with major constraints.

During the past 5 years I have been researching alternative insecticides to carbaryl for control of burrowing shrimp in shellfish beds (estuaries). Oyster growers have long struggled with the management of "ghost" shrimp that burrow into mud beneath oysters. The shellfish will suffocate and die if they sink into the voids the shrimp leave behind. In 2006 we determined that imidacloprid was the most appropriate candidate replacement product to try to pursue registration. To stay within the one-acre Washington State EUP, only limited small-scale trials were conducted. The IR4 study in 2007 took up almost the entire 1 acre state EUP, whereby severely limiting our ongoing research. We could not conduct additional smaller-scale trials on growers' beds to assess efficacy and studies to address fate and persistence without an approved federal EUP. The current federal exemption for small-scale testing lacks flexibility and can be unduly restrictive to researchers. Because of a 2012 settlement agreement to stop using carbaryl, the time to register an alternative to carbaryl is very limited. We are being hampered in the development of the necessary data. As a result, it is taking longer in the development of new replacement pesticides and we may not be able to meet deadlines without a larger federal EUP.

In addition, Don Stubbs recently informed Dr. Catherine Daniels (WSU) that before EPA could proceed with reviewing our federal EUP application they would need to get a determination from the Attorney General office if WSU qualifies as a state agency. If not then we would need to submit for a waiver and potential use limited research funding to pay 25% of the federal EUP registration fee.

To illustrate my point further, below are three others examples I have had to contend with in the past several years:

1. *Registration of imazapyr for control of invasive cordgrass (Spartina alterniflora) in Pacific coast estuaries*. I spent more than ten years trying to get an herbicide registered to control *Spartina*. During that time it expanded from 1,000 acres to 10,000 acres of mudflats in Willapa Bay. Although we were ultimately successful, our research project was constantly stymied due to our inability to conduct small-scale applications less than 1 surface aquatic area. Small scale aerial applications, which are less than 1 acre are impractical and untenable. Therefore, it took 2 years of use after it was registered to address how to make successful broadcast applications from air, boat and amphibious vehicle. These are the types of data that could have been collected under a state EUP if

researchers could operate with small-scale aquatic trials under 10 acres pest/state/year. The end result of these delays is that many millions $ more in *Spartina* control efforts has been required.

2*: Limitations in conducting research on the control Eurasian Watermilfoil or Brazilian Elodea in lakes using injected aquatic herbicides.* Researchers can not viably evaluate aquatic herbicides in small-scale lakes using injected herbicides because the whole body of water requires treatment. Finding many uniformly infested small lakes, which are 1/10 of an acre, for replicated plot work is not practical if not nearly impossible to find. Therefore I've had to settle for one treatment in one lake with less than one-acre, with one active ingredient (one rate, one timing, unreplicated). The resulting data obtained from these types of restrictive studies often requires 5+ years of work to determine if sometimes might work and what it might work at. Expanding the exemption for federal EUPs on aquatic sites to less than 10 acres would make a significant difference in the ability of researchers to conduct replicated trials using several small ponds and lakes.

3. *Registration of herbicides to replace Acrolein in irrigation canals.* In the past two years I have been working to find a replacement to acrolein for control of Sago pondweed in irrigation canals. This is one of EPA's major priorities. Our work focuses on applications at the end of the irrigation season (water is no longer used, but canals are still wet and therefore an aquatic EUP still pertains). Putting out one application along just 1500' of ditch uses my entire state EUP acreage allowance (with no replications, no rates work, and no additional sites). Again this makes it nearly impossible to collect viable efficacy and persistence data.

In summary, the proposed amendment of the exemption from federal EUP acres would be extremely helpful for researchers in Washington State. It would be adequate to assure that the majority of the data necessary to support a registration could be gathered without undue delay or problems. It is still restrictive enough to assure that adequate environmental safeguards are in place. Thank you for your consideration to this matter.

cc: Ann Wick, President, AAPCO
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Wendy Sue Wheeler, Aquatic Pesticide Specialist, WSDA
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