STATE OF WASHINGTON
DEPARTMENT OF AGRICULTURE
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MEMORANDUM

Date: October 4, 2010

To: Kathy Hamel, Aquatic Plant Specialist
Department of Ecology, Water Quality Program

From: Erik W. Johansen, Special Pesticide Registration Program Coordinator
WSDA, Registration Services Program

RE: Destiny HC and Superb HC

I recommend that you add Destiny HC (WA Reg. No. 1381-09002) and Superb HC (WA Reg. No. 1381-06003) to the list of spray adjuvants that are allowed for use on aquatic sites in Washington under the applicable Aquatic Pesticide Permits issued by Ecology. Here is a summary of the aquatic acute toxicity information for Destiny HC and Superb HC:

Product name	Registrant	Principal Functioning Agents	Acute toxicity to Rainbow trout	Acute toxicity to Daphnia magna
Destiny HC	Winfield Solutions	Modified vegetable (seed) oil, saccharides, sorbitan fatty acid ester	LC50 (96 hour) 21.71 mg/L, Slightly toxic	LC50 (48 hour) 28.63 mg/L, Slightly toxic
Superb HC	Winfield Solutions	Petroleum oil, saccharides, polyoxyethylene sorbitan fatty acid ester	LC50 (96 hour) 45.0 mg/L, Slightly toxic	LC50 (48 hour) >100 mg/L, Practically non-toxic

Destiny HC and Superb HC are currently registered for distribution in Washington. Aquatic acute toxicity studies for Destiny HC and Superb HC have been reviewed by Jim Cowles, Ph.D. (WSDA Environmental Toxicologist), and the studies are acceptable. Destiny HC and Superb HC meet all WSDA criteria for registration of spray adjuvants for aquatic use (attached). Addition of Destiny HC and Superb HC to the Aquatic Pesticide Permits will provide additional options for aquatic pesticide applicators.

Aquatic acute toxicity studies are on file at WSDA Registration Services Program, and are available for review by Ecology. Feel free to contact me if there are any questions regarding this proposal.

attachment
cc: Mike Norman, WSDA
Jim Cowles, WSDA
Ted Maxwell, WSDA
Annelle Finstad, Winfield Solutions

Definition

WSDA Criteria for Registration of Spray Adjuvants for Aquatic Use:

The following criteria must be met to register a spray adjuvant for aquatic use in Washington:

- The adjuvant must fulfill all requirements for registration of a food / feed use spray adjuvant in Washington.
- The adjuvant must be either slightly toxic or practically non-toxic to freshwater fish. Rainbow trout (*Oncorhynchus mykiss*) is the preferred test species.
- The adjuvant must be moderately toxic, slightly toxic or practically non-toxic to aquatic invertebrates. Either *Daphnia magna* or *Daphnia pulex* are acceptable test species.
- The adjuvant formulation must contain less than 10% alkylphenol ethoxylates (including alkylphenol ethoxylate phosphate esters).
- The adjuvant formulation must not contain any alkyl amine ethoxylates (including tallow amine ethoxylates).

Exceptions: WSDA may register spray adjuvants for aquatic use that do not meet one or more of the above criteria if the registrant (a) provides data which demonstrates that the proposed use will not adversely affect desirable aquatic species, or (b) limits aquatic use to non-fish bearing waters only. These criteria do not apply to adjuvants that are permitted for use under an experimental use permit issued by WSDA.