



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 29 2010

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

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Dear Mr. Weinberg and Mr. Menotti:

Thank you for your letters of December 7, 2009 and January 22, 2010, on behalf of Dow AgroSciences, Makhteshim Agan of North America, and Cheminova (the registrants), regarding EPA's approach for implementing the National Marine Fisheries Service (NMFS) 2008 biological opinion addressing use of chlorpyrifos, diazinon, and malathion relative to 28 Pacific salmon and steelhead species (the BiOp). Your letters raised several issues related to EPA's implementation plans for the BiOp including issues related to the draft Endangered Species Protection Bulletins and embedded buffer calculator.

I will respond to your specific comments below, but first I want to describe how EPA plans to implement the substantive elements of the BiOp. In EPA's November 16, 2009 response to your October 6, 2009 letter regarding implementation of the BiOp, EPA provided its response to the conceptual points you provided. EPA's position on those points has not changed. As noted in that correspondence, EPA did provide .pdf files of the draft bulletins for the registrants' review. After considering input from you and others and making corrections and changes based on that input, EPA provided on January 8, 2010, the revised draft bulletins, including instructions on how to access the buffer calculator, and provided the registrants with another two weeks to review these materials.

EPA requested that the registrants provide written responses commenting on the draft bulletins and expected to receive information regarding those aspects of the bulletins the registrants were and were not willing to adopt. Since this specific information was not provided in your December 7, 2009 or January 22, 2010 letters, EPA requests that you respond to this letter by Thursday, May 13, 2010 indicating whether the registrants will adopt all or some of the use limitations, consistent with EPA's description in this letter of the modifications to the bulletins.

Following is a summary of the issues raised or statements made in your December 7, 2009, and January 22, 2010 letters, and EPA's response.

Buffer Calculator - You identified a variety of concerns or questions regarding the buffer calculator.

EPA Response – We have made or are making several adjustments based on your input. The issues you raised and how we have or have not revised the calculator are as follows:

- Your January 2010 letter expressed a need to explain how the buffers are to be employed relative the presence or absence of water in intermittent streams, irrigation returns, etc. Based on the information in the biological opinion, these buffers apply to intermittent stream beds even in the absence of water at the time of application. To accomplish calculation of the relevant buffer, a prompt in the buffer calculator now indicates that the input for width (and depth if needed) of the water body is to be determined based on the normal high water mark.
- In response to the comment that the calculator does not indicate the units for the application rate prompt, the prompt has been modified to indicate lb ai/acre. Further, an additional screen will allow the user to convert other application rate units (e.g. ounces per square foot) to lb ai/acre.
- The prompt for application rate will allow selection of 0.5 lb ai/acre to account for "several common use patterns" that use 0.5 lb ai/acre application rates as you indicated exist in your January 2010 letter.
- The January 2010 letter suggested that depth selections of 0.49 feet or 0.66 feet are not necessarily measurements that can easily be applied under field conditions. The seemingly odd depths were an artifact of converting the metric depth measurement in the BiOp to non-metric. The depth of water selections relative to off channel habitat geometry are being rounded to provide more meaningful measurements to the pesticide users.
- The January 2010 letter suggested that the bins used for water body depth for off channel habitat are too broad and that there should be options of ½ foot, 1 foot, 1 to 2 feet, and 2 to 3 feet. EPA has not adopted this suggestion. The specific intervals selected were noted in EPA's September 10, 2009, response to the National Marine Fisheries Service and the rationale for their selection, which was based in large

measure on habitat geometry information, was explained in the technical appendix to that letter.

- EPA has not included an exception for the use of malathion for mosquito control in our buffer calculator as suggested in your January 2010 letter. Contrary to your assertion that this use will “clearly pose no threat to the survival of any of the listed salmonid species in question”, the NMFS BiOp did not distinguish this use as one without influence on the species in question. In fact, the BiOp would apply the 500 and 1,000 foot buffers for ground and aerial applications respectively, to all uses.

Bulletin Text Changes - There were a variety of suggested changes to the text of the specific limitations in the bulletins. Additionally, changes to the boilerplate text of the bulletins were suggested.

EPA Response - EPA has adopted one of your suggestions but is unable to accommodate the remainder as noted below.

- Your December 2009 letter requested that the language for Code 22 be modified to indicate that fish kills reported to the pesticide manufacturer should be accomplished **using the contact information on the pesticide label**. The language of Code 22 has been modified in this manner.
- The December 2009 letter suggested changes to the language for Code 21 that would result in a prohibition of use only when soil moisture was at field capacity **and** a storm event likely to produce runoff is forecast. EPA cannot adopt this change since the limitation as provided in the BiOp was intended to apply either when the soil moisture was at field capacity **or** when a storm event likely to produce runoff is forecast.
- The December 2009 letter also suggested changes to the language of Code 99 which would redefine the waters to which the buffers apply, provide exceptions for certain application methodology such as use of drip irrigation or sprinklers, and would permit a smaller buffer than those indicated if the wind was blowing away from the sensitive habitat during the application period. These recommendations substantively alter the use limitations as deemed necessary by NMFS in the BiOp and substantively alter the water bodies to which the use limitation is to be applied. As a result, EPA is not adopting these changes to the text of Code 99.
- The December 2009 letter expressed your belief that the “bulletins are fundamentally misleading” and that regardless of any text currently on the bulletin “the overwhelming impression of the document is that use of the product at issue is banned in the entire colored (or patterned) areas.” You offered changes to the generic language of the bulletins which you believe would resolve this perceived impression. EPA is not adopting your recommended changes to the generic language of the bulletins. This specific language was developed over a long period of time with input from states, growers, registrants and the Pesticide Program Dialogue Committee. The

generic language of the bulletins was carefully developed to accommodate the variety of limitations that may be incorporated into a bulletin. The changes suggested in your letters to the generic information would not apply universally to all pesticide/species limitations that may ultimately be included. Further, it has been discussed in many public venues over the past several years that, in order to avoid area wide bans on use, EPA would identify a geographic area in which more specific limitations would apply. This is precisely the approach EPA has taken in this instance and EPA does not agree that the bulletins are misleading in that regard.

General Statements or Requests for Clarification - Your letters also made statements about, or requested clarification on, a number of aspects of our implementation of the BiOp

EPA Response – Following is a summary of the statements or requests for clarification made in your letter(s) with EPA’s response to each statement or point.

- The January 2010 letter notes that the buffer calculator allows a selection for depth of water, only for natural waters and therefore, a default value must have been used for the depth parameter of man-made water conveyances. You requested that EPA provide the default value and the basis for its selection. The input parameter for depth applies only to those natural water bodies less than 35 feet in width designated by NMFS as off-channel habitat. The default depths used for each of the widths for other water bodies and man made conveyances and the reason for those default depths are described in the Technical Appendix to our September 10, 2009 letter to the NMFS (Section B, Table 1).
- The January 2010 letter noted that the draft bulletins were applying buffers to water bodies that salmon may live in but also to “irrigation ditches and stagnant waters which may be miles from any salmonid feeding area”. The waters to which the buffer limitation applies were defined by the National Marine Fisheries Service as being those related to salmonid protection. Specifically, the BiOp defined the habitat to which buffers should apply as “freshwaters, estuarine habitats, and nearshore marine habitats including bays within the ESU/DPS’ ranges including migratory corridors. The freshwater habitats include intermittent streams and other temporally connected habitats to salmonid-bearing waters. Freshwater habitats also include all known types of off-channel habitats as well as drainages, ditches, and other manmade conveyances to salmonid habitats that lack salmonid exclusion devices.”

This definition was essentially confirmed by NMFS in July 2009 in response to our request for clarification of the habitat described in the biological opinion. EPA was informed at that time, that the BiOp and its RPAs applies to “the current range of listed salmonids and includes freshwater, estuarine and nearshore marine habitats including bays within each ESU/DPS’ current range. The freshwater habitats include intermittent streams and other temporally connected habitats to salmonid-bearing waters. They also include off-channel habitats as well as drainages, ditches, and other man-made conveyances to salmonid habitats that lack salmonid exclusion devices.”

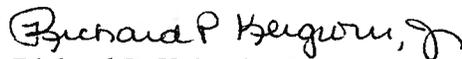
In both very similar definitions, the waters to which buffers apply are those which are temporally connected to salmonid-bearing waters. Further, off-channel habitats, drainages and ditches to which the buffers apply are those that are conveyances to salmonid habitats and that lack salmonid exclusion devices. As such, it is EPA's belief that discrete stagnant waters or mud puddles which are not conveyances to salmonid-bearing waters would not be considered habitat under this definition.

- The January 2010 letter expressed the opinion that there has been a lack of transparency and opportunity for input to the BiOp implementation planning and that no attempt was made to solicit input from growers and applicators. As EPA has previously noted, from the time of EPA's receipt of the Reasonable and Prudent Alternatives and Measures, and within the time frames permitted, EPA has sought input – first through publishing information regarding the BiOp itself and later through discussions and provision of information to you, our regional offices, and state pesticide agencies. On phone calls with and emails to EPA regional offices OPP indicated that draft bulletins could be shared with growers and that we welcomed such input. Input was provided by the state pesticide agencies that in some cases also relayed input from grower organizations with whom they had communicated.

EPA is prepared to receive the registrants' decisions on what aspects of the bulletins, with the modifications described above, they are and are not willing to adopt on a voluntary basis as pesticide use limitations for their products. As noted above, the Agency requests a response to this letter by Thursday, May 13, 2010. If the registrants are prepared to adopt some of these limitations, the Agency will work with you to develop the terms and conditions of the amendment request and the process that will be followed to proceed with requesting these changes to product labeling. Please note, however, that if the registrants are not prepared to adopt all of these limitations, EPA will pursue administrative procedures under the Federal Insecticide, Fungicide, and Rodenticide Act to compel implementation of all limitations.

If you have any questions regarding the information in this letter, please contact me on (703) 308-8000.

Sincerely,



Richard P. Keigwin, Jr.

Director, Pesticide Re-evaluation Division

cc: Steven Bradbury  
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