MEMORANDUM

SUBJECT: Review of Requests by Washington (99-WA-05) [Barcodes: D252010 and D252011], Oregon (99-OR-06) [Barcodes: D252014 and D252015], and Idaho (99-ID-03) Barcodes: D252002 and D252007] to Use Pendimethalin (Prowl, AI: 108501) to Control Kochia and Redroot Pigweed on Mint

FROM: James G. Saulmon, Botanist
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TO: Steve Schaible/Robert Forrest
Registration Support Branch
Registration Division (7505C)

We have reviewed the requests by Washington, Oregon, and Idaho for an emergency exemption to use pendimethalin on mint to control kochia and redroot pigweed. We find the situations in Washington, Oregon, and Idaho to be nonroutine. We also find little change in the weed control situation for kochia and redroot pigweed. That is, mint growers did not have adequate control of kochia and redroot pigweed in the past using registered herbicides. They currently still do not have adequate control of kochia and redroot pigweed. WA has provided efficacy data for pendimethalin for kochia and pigweed. Rocky Lundy has provided an update for Washington, Oregon, and Idaho which is attached.

We agree with the conclusions which BEAD reached in the previous review of the Sect. 18 request for pendimethalin use on mint grown in WA, OR, and ID. As mentioned above, mint growers in those states are likely to continue to experience significant yield and quality losses in 1999 without pendimethalin. Due to weed resistance to registered herbicides like terbacil, significant economic losses are expected using currently available alternative controls.
With the tri-state exemption in place for 1999, the income of mint growers is projected to remain within its range of fluctuation over the last five years, when the pendimethalin emergency exemption was granted. In the absence of pendimethalin to control the weeds, expected yield losses with registered alternative controls are likely to be higher than the break-even point of about 10 percent. The resulting income losses would create a significant economic impact for mint producers in the tri-state area this year.

Rocky Lundy (e-mail: mirc@gorge.net) provided the following message on 1/25/99:

To: saulmon.james  
Subject: Prowl Sec.18  

1. Have there been any new chemicals registered in mint?  
There has been one new registration, Assure II, which is a post emergent grass herbicide. This new registration does not control any weeds which Prowl is used for (i.e. Pigweed, Kochia) which are broadleaves. It is also a post-emergent grass herbicide and Prowl is pre-emergent. 

2. Progress towards Prowl registration. 
Unfortunately, the EPA has not put this compound on their 1999 list of registration reviews. The registration package has been at the Agency for over 2 years. 

Depending on the geographical region (weather, growing season, etc.) yields have generally been below average or above average. The mint growing areas which use Prowl under the sec. 18 have either been average or slightly above average due to the use of Prowl and good control of competing weeds. 

4. Changes in weed species and populations.  
There has been shifts in some weed species due to lack of registered compounds for control of the weed species Prowl does not control (i.e., common groundsorrel, yellow nutsedge) and weeds which germinate later in the growing season which Prowl has no effect on, since it is a pre-emergence herbicide which acts only on germinating weed seeds. The increase can also be attributed to the lack of mint growers rotating out of mint to other crops (which broke some weed cycles) as frequently as they have in the past. This is due (to) depressed prices of other commodities and mint growers feel they are better off to leave mint in another year. 

In summary, the Prowl sec. 18 has enabled mint growers to effectively control weeds before they germinate. But mint growers are still faced with no control method after the mint has emerged and new populations of weeds not impacted by the pre-emergent application of Prowl germinate. If you have any further comments or questions, please feel free to contact me.  
Thank-you and Best Regards, Rocky Lundy.