Use of Aerial Applications of Chlorsulfuron in California, Particularly on Wheat and Barley

Date: February 16, 2005

To: Nicole Zinn

EPA

From: Rick Melnicoe Director, WIPMC

Subject: Use of Aerial Applications of Chlorsulfuron in California, Particularly on Wheat and

Barley

Dear Nicole,

Following your questions are the answers (in bold). Rick

February 16, 2005

To: Rick Melnicoe
Director, WIPMC

From: Nicole Zinn

EPA

Hi Rick,

I'm trying to characterize how aerial applications of chlorsulfuron are being used in California, particularly on wheat and barley. The data that I have (from multiple sources) show that about 14% of barley and 4% of wheat acreage in California are treated with chlorsulfuron. Of this, it seems as if quite a bit is treated with aerial application (approx. 70% of barley apps. and 40% of wheat apps.)

I also have some data from the California database that shows both ground and aerial applications are used for these crops, although I haven't yet determined the percentages from this database.

- 1. Is this consistent with what you know?
 - No. If these numbers don't seem reasonable, please let me know. See below.
- 2. Is there a reason why aerial applications are being used instead of ground applications? *Ground applications are the norm.*

Is aerial application less expensive than ground applications? *This is not a factor.*

Are ground applications not feasible in certain situations, such as weather, terrain, etc.? *Aerial applications would be used when the ground is too wet for tractors.*

3. In addition, if similar information is available for pasture and rangeland uses, that would be helpful as well.

These data are not possible to extract from the Pesticide Use Reporting System and County Agricultural Commissioners \tilde{A} Data.

For Year 2002 in California. Data from <u>California Department of Pesticide Regulation</u> Pesticide Use Reporting System and <u>California Agricultural CommissionersÃ</u> Data

Barley				
Acres Harvested	Acres Treated w/chlorsulfuron	Amount a.i. applied	Acres treated by air	Acres treated by ground
73,685	2,637 (3.6%)	28.79	130 (4.9%)	2,507 (95.1%)
Wheat				
Acres Harvested	Acres Treated w/chlorsulfuron	Amount a.i. applied	Acres treated by air	Acres treated by ground
534,882	5,545 (1.0%)	47.48	566.5 (10.2%)	4,978.5 (89.8%)