April 1, 2003

TO: Interested Parties

SUBJECT: DETERMINATION OF THE DIRECTOR UNDER ASSEMBLY BILL 2356: CLOPYRALID IN COMPOST

Introduction

The passage of Assembly Bill (AB) 2356 (Keeley) places limitations on the sale of clopyralid turf products and requires the Department of Pesticide Regulation (DPR) to take certain actions. In part, the DPR Director is required to make a determination by April 1, 2003, on which lawn and turf uses are likely to result in persistent residues in compost and which uses will not. Persistent residues are defined by the bill as "residues of an herbicide in compost at levels and in a form with the potential to be toxic or injurious to plants." For those uses that are likely to cause persistent residues in compost, the Director must either impose restrictions or cancel uses. Through this document, I am fulfilling the requirements of AB 2356.

Requirements of AB 2356

AB 2356 requires that, not later than April 1, 2003, the DPR Director shall, pursuant to Food and Agricultural Code sections 12824 and 12825, do the following:

1. Determine in writing those lawn and turf uses of the herbicide clopyralid for which there is no reasonable likelihood that the specified use will result in persistent residues in compost.

2. Take either of the following actions:
   a. Impose restrictions on the lawn and turf uses of the herbicide clopyralid that are not identified in the determination.
   b. Cancel any lawn and turf use that the Department determines is likely to result in persistent residues in compost.

Background for the Determination

Information and data available to DPR for the AB 2356 determination included: compost monitoring data; sales data on clopyralid turf products; product stewardship efforts by
Dow AgroSciences; educational efforts by user associations and cooperative extensions; disposition of grass clippings; and phytotoxicity data on sensitive plants grown in various combinations of soil/compost or compost/peat containing clopyralid. The information is summarized in the attached document. The most relevant findings are:

- Grass clippings from residential and nonresidential (commercial) sites are co-mingled at collection sites as they become a compost feedstock. The collection of grass clippings appears to be the predominant practice, rather than grass cycling on site.

For golf courses, grass cycling on fairways and roughs is the industry standard. Grass from tees and greens is collected and may be composted, but clopyralid turf labels prohibit use on greens and tees. Some desert golf courses may remove grass clippings in the transition from summer to winter turf.

- No phytotoxicity resulting from clopyralid in compost has been reported to DPR during the last 1.5 years.

- Recently submitted studies examined the phytotoxicity of clopyralid to sensitive plants under defined conditions of soil/compost and compost/peat combinations with varying levels of clopyralid. Observations from the studies of phytotoxic symptoms vary with plant species and do not necessarily predict economic damage to the plants.

- Compost monitoring data were inconclusive, indicating a declining frequency of detection, but showing continued low levels of detection of clopyralid in some samples.

- Sales data from DPR’s mill tax database and Dow AgroSciences suggest declining sales of turf products during the last 1-1.5 years. The declining use may account for the declining frequency of clopyralid detection in compost. There is no guarantee that clopyralid turf uses will remain at the current levels.

- The data on clopyralid phytotoxicity suggests that there would be a low probability of phytotoxicity occurring on sensitive plants given the levels of clopyralid detected in California compost at the current time. However, the data indicate that in some circumstances, the potential of phytotoxicity may currently exist and does potentially exist in the future.

In AB 2356, the definition of persistent residues in compost covers a broad range of characteristics including the potential to be toxic: "residues of an herbicide in compost at levels and in a form with the potential to be toxic or injurious to plants." DPR acknowledges the potential diverse uses of compost throughout the state in commercial agriculture, the nursery
industry, and home gardens, and cannot determine that there is no reasonable likelihood of persistent residues in compost from all turf uses of clopyralid.

**Determination of the Director**

It is the determination of the DPR Director that the use of the herbicide clopyralid on golf courses meets the standard in AB 2356 that there is no reasonable likelihood of persistent residues in compost. Other lawn and turf uses of the herbicide clopyralid on sites such as parks, playing fields, cemeteries, and commercial (nonresidential) sites do not meet the standard of no reasonable likelihood that uses will not result in persistent residues in compost, and will be subject to restrictions.

The restrictions that DPR will impose on these lawn and turf uses of clopyralid will be contained in regulations promulgated by DPR. Under the existing requirements of AB 2356, the restrictions will require that only qualified or certified applicators can purchase clopyralid products labeled for use on lawn and turf. Building upon this statutory requirement, DPR will promulgate regulations to restrict the manner in which these licensed or certified individuals use clopyralid turf products. The restrictions will prohibit these persons from applying clopyralid to turf unless they can assure that grass clippings will remain on the site and/or not have the potential to enter the compost stream. To maximize outreach and compliance, we will require licensed pest control dealers to provide licensed purchasers of clopyralid turf products with information regarding applicator responsibility on assuring that grass clippings from the treated site do not enter the compost stream offsite. While the rulemaking package will take time to finalize, we will immediately notify pest control dealers and pest control operators of our decision to limit the use of clopyralid.

We will continue to work with the California Integrated Waste Management Board on the potential impact of clopyralid in compost and take appropriate action.

Sincerely,

Paul Helliker
Director
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Attachment