October 2, 2002

TO: Each Supervisor

FROM: Thomas L. Garthwaite, M.D.
Director and Chief Medical Officer

SUBJECT: ACTION PLAN TO ENSURE THAT CLOPYRALID IS KEPT OUT OF COMPOSTING SITES

On February 15, 2002, a report on clopyralid was submitted to the Board of Supervisors with the recommendation to perform a pilot study to aid in the development of a specific action plan for the County of Los Angeles to keep clopyralid out of composting sites. A status report was sent to you on August 29, 2002.

Attached is the final report on the Clopyralid Pilot Study with recommendations.

If you have any questions or need additional information, please let me know.

TLG:vm
201:018

Attachments

c:  Chief Administrative Officer
    County Counsel
    Executive Officer, Board of Supervisors
    Agricultural Commissioner/Director of Weights and Measures
    Chief Engineer and General Manager, County Sanitation Districts
Background

Los Angeles County relies heavily on greenwaste diversion to meet its AB939 goals and also utilizes composting as an important and cost-effective means of managing biosolids. The Los Angeles County Board of Supervisors commissioned a 90-day pilot study to develop an action plan to ensure that clopyralid is kept out of composting sites. The pilot study provided information to assess greenwaste fate in the County and establish which feedstocks were diverted to composting, ascertain whether clopyralid was currently found in any of these waste streams, and determine actions that could be taken to monitor and prevent any potential harm caused by the presence of clopyralid in composts made from the County’s greenwastes and/or biosolids.

Greenwaste Fate in Los Angeles County

There are five major ways greenwastes are diverted from landfill disposal in Los Angeles County. They can be used as Alternate Daily Cover by landfills permitted to do so, composted on-site by the generator or a facility that receives it in bulk then chips/grinds it for compost, sent to an off-site composter (most of these end up out-of-county), sent as fuel to a waste-to-energy plant, or mulched (not composted).

Staff of the Solid Waste Management Program visited 49 sites and sampled 52 products/feedstocks. All samples tested non-detect (at a 5 ppb detection level). The Agricultural Commissioner/Weights and Measures Environmental Toxicology Bureau performed the laboratory analysis of the samples and the County Sanitation Districts provided continuing input and logistical support throughout the project.

Potential Exposure Pathways

Clopyralid is a long-lived broadleaf herbicide approved for use on numerous agricultural crops, rangelands, and right-of-ways. It has very low toxicity to animals and humans. There is no identifiable entry pathway for greenwastes derived from rangelands and right-of-ways to enter Los Angeles County composting facilities. The only major agricultural inputs identified so far are livestock feed and bedding. These were the major source of clopyralid contamination at Washington State University’s composting facility.

Clopyralid use has increased since it was approved for use in California in 1997. The first clopyralid use in Los Angeles County was recorded in 1999. In that year 15.02 pounds of active ingredient was used. More than 91 percent of this was for “landscape maintenance.” In 2000, the last year for which data is currently available, the amount rose to 441.76 pounds of active ingredient, with more than 98 percent used for “landscape maintenance.”

Clopyralid use on ornamental turf has the greatest potential for entering Los Angeles County’s compost feedstocks. This can be industrial/commercial (golf courses, cemeteries, parks, condominium complexes, commercial business parks, etc.) or residential homes where a commercial landscaping company applies a clopyralid-containing herbicide for broadleaf weed control.
California Environmental Protection Agency's Department of Pesticide Regulation (DPR) began the process to cancel the registration of clopyralid for residential turf use in March of this year. In August, Dow AgroSciences, the manufacturer of clopyralid, requested that the product labels be changed to remove the use of clopyralid on residential turf. While this restriction may have a greater impact in other parts of the country, it does not appear that this will have a great effect in Los Angeles County. Few landscape maintenance companies appear to be using clopyralid on residential properties, and agricultural use on hay and straw, utilized for stable bedding or feed, would not be affected by the ban.

**Recent Legislation**

Assembly Bill 2356 (copy attached), introduced by Assemblyperson Keeley and co-sponsored by Assemblypersons Migden and Strom-Martin as well as Senator Romero, specifically addresses the potential negative impact that clopyralid could have on the composting industry in California. This new law mandates that only a licensed pest control dealer may sell a product containing clopyralid and that only qualified applicators may purchase it. This allows the continued beneficial uses in agriculture, rangelands, and rights-of-way with close DPR oversight. The law further tasks DPR with determining those lawn and turf uses of clopyralid that have no reasonable likelihood to result in persistent residues in compost. All other uses must then be addressed by either appropriate restrictions or cancellation. These determinations are due no later than April 1, 2003.

**Suggested Actions/Recommendations**

Clopyralid was not found in any of the samples collected by Solid Waste Management Program staff. These data do not suggest that clopyralid is a widespread problem in Los Angeles County at this time. It is therefore recommended that we await the outcome of DPR’s efforts in response to AB2356.

The Director of Pesticide Regulation and the California Integrated Waste Management Board are conducting ongoing discussions in order to make findings on the appropriate uses and restrictions for clopyralid. Solid Waste Management Program staff will share data from our survey and be active participants in these discussions.
An act to add Article 18 (commencing with Section 13190) to Chapter 2 of Division 7 of the Food and Agricultural Code, relating to solid waste.

LEGISLATIVE COUNSEL'S DIGEST

AB 2356, Keeley. Solid waste: compost contamination

Existing law provides that the Director of Pesticide Regulation shall endeavor to eliminate from use in the state any pesticide that endangers the agricultural or nonagricultural environment, is not beneficial for the purposes for which it is sold, or is misrepresented. Existing law specifies the circumstances under which the director may cancel the registration of, or refuse to register, a pesticide.

This bill would make findings and declarations regarding the potential threat to composting programs posed by the herbicide clopyralid. It would provide that no person, except a licensed pest control dealer, as specified, may sell a pesticide that contains the active ingredient clopyralid. The bill would further provide that pesticides containing this active ingredient that are labeled for use on lawn and turf may only be sold to qualified applicators, as specified. The bill would require the Department of Pesticide Regulation to make determinations regarding the residues in compost created by lawn and turf uses of clopyralid and to impose appropriate restrictions on those uses or cancel the uses that are likely to result in persistent residues in compost. Because a violation of these provisions would be a crime, the bill would impose a state-mandated local program.
The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS

SECTION 1. The Legislature finds and declares the following:

(a) The California Integrated Waste Management Act of 1989 requires all cities and counties to develop source reduction, recycling, and composting programs to achieve a 50 percent reduction in the amount of solid waste disposed of in California. Local governments and waste haulers divert 6,000,000 tons of yard waste annually from landfills to composting facilities, making composting a principal means by which local governments meet the state's landfill diversion requirements.

(b) The success of the state's composting programs, and the economic viability of the California composting industry, are imminently threatened if residential, agricultural, commercial, and public users of compost lose confidence in the quality and safety of the product.

(c) During 2000 and 2001, the herbicide clopyralid was detected in compost produced at composting facilities in Spokane and at Washington State University.

(d) Sampling conducted by an independent laboratory at 29 compost facilities in California in 2002 found clopyralid in compost at 19 of the sites at levels up to 13 ppb. Sampling conducted at composting facilities operated by the Cities of Los Angeles and San Diego detected clopyralid levels as high as 28 ppb.

(e) In a March 6, 2002, statement before the California Integrated Waste Management Board, the department declared that "(R)esidue levels will not need to be at phytotoxic levels in order for (the department) to initiate regulatory action. DPR's goal is to prevent the problem from occurring."

(f) On March 28, 2002, the department initiated cancellation of products containing clopyralid that are registered for use on residential lawns. The department did not cancel the use of products registered for other nonresidential lawn and turf uses.

(g) According to a 1999 Waste Characterization study prepared by the Integrated Waste Management Board, 50.5 percent of leaf and grass waste generated in California comes from residential sites and 49.5 percent comes from nonresidential sites, including, but not limited to, sites such as commercial offices and grounds, public parks, golf courses, and cemeteries.

(h) Lawn care companies typically provide their services to both residential and commercial accounts and dispose of lawn clippings from both residential and nonresidential sites in a similar manner. Many lawn care companies dispose of lawn clippings at a composting facility or at a transfer station for delivery to a composting facility. Because it costs approximately 50 percent less to dispose of lawn clippings at a composting facility instead of a landfill, lawn care companies have a further economic incentive to compost their lawn clippings.

SEC. 2. The Legislature further finds and declares:

(a) The composting industry is of vital importance to the well-being of the state because it produces a product that is important and beneficial to the production of agricultural commodities and to the horticultural industry and home gardening. It further produces its product from materials that are diverted from landfills in the state, in furtherance of the state's requirement to divert 50 percent of solid waste from landfills.
(b) Section 12825 of the Food and Agricultural Code authorizes the department to cancel the registration of, or refuse to register, any pesticide that is of less value or greater detriment to the environment than the benefit received by its use; for which there is a reasonable, effective, and practicable alternate material or procedure that is demonstrably less destructive to the environment; or that, when properly used, is detrimental to vegetation, except weeds.

(c) There is an urgent need for the state to take all necessary steps to ensure that pesticides applied to lawn and turf do not persist in compost.

SEC. 3. Article 18 (commencing with Section 13190) is added to Chapter 2 of Division 7 of the Food and Agricultural Code, to read:

Article 18. Contamination of Compost

13190. (a) "Clopyralid" means 3,6-dichloro-2-pyridinecarboxylic acid.
(b) "Compost" means the product resulting from the controlled biological decomposition of organic wastes that are source separated from the municipal solid waste stream, or that are separated at a centralized facility.
(c) "Department" means the Department of Pesticide Regulation.
(d) "Herbicide" means a pesticide, as defined in Section 12753, that is intended to kill weeds.
(e) "Lawn and turf use" means a residential or nonresidential use of an herbicide on lawn and turf, including, but not limited to, lawn and turf located at schools, parks, office buildings and golf courses. Lawn and turf use does not include use of an herbicide on lawn and turf located in turf farms, uncultivated open space, agricultural rangeland or cultivated farmland.
(f) "Persistent residues in compost" means residues of an herbicide in compost at levels and in a form with the potential to be toxic or injurious to plants.
(g) "Plants" means desirable vegetation, except weeds.
(h) "Weed" means any plant that grows where not wanted, as defined in Section 12759.

13191. (a) No person, except a pest control dealer licensed pursuant to Chapter 7 (commencing with Section 12101) of Division 6 of the Food and Agricultural Code, may sell a pesticide that contains the active ingredient clopyralid.
(b) Pesticides containing the active ingredient clopyralid that are labeled for use on lawns and turf, including golf courses, may only be sold to qualified applicators licensed pursuant to Chapter 8 (commencing with Section 12201) of Division 6 of the Food and Agricultural Code or issued a certificate pursuant to Chapter 3 (commencing with Section 14151) of Division 7 of the Food and Agricultural Code.

13192. Not later than April 1, 2003, the department shall, pursuant to Sections 12824 and 12825, do both of the following:
(a) 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.
(b) Take either of the following actions:
(1) Impose appropriate restrictions on the lawn and turf uses of the herbicide clopyralid that are not identified in the determination made pursuant to subdivision (a).
(2) Cancel any lawn and turf use that the department determines is likely to result in persistent residues in compost.
SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.