

**Resolution No. 005-02-COE**  
**Clopyralid and other Pesticides that are Persistent in Compost**

URGING THE MAYOR AND THE BOARD OF SUPERVISORS OF THE CITY AND COUNTY OF SAN FRANCISCO: TO EXPLICITLY BAN THE USE OF CLOPYRALID (AND ANY OTHER PESTICIDES THAT ARE PERSISTENT IN COMPOST) BY CITY DEPARTMENTS; TO WRITE TO STATE AND FEDERAL AGENCIES AND STATE LEGISLATORS TO BAN THE USE OF CLOPYRALID (AND ANY OTHER PESTICIDES THAT ARE PERSISTENT IN COMPOST) AND TO REQUIRE MANUFACTURER COMPENSATION OF COMPOST PRODUCERS AND COMPOST PRODUCT USERS FOR DAMAGES SUFFERED DUE TO THE USE OF CLOPYRALID OR OTHER PERSISTENT PESTICIDE CONTAMINATED COMPOST.

WHEREAS, the California Integrated Waste Management Act of 1989 mandates that the City and County of San Francisco divert 50% of all waste generated by the year 2000 or by approved extension, or otherwise be subject to fines of up to \$10,000 per day;<sup>1</sup> and, WHEREAS, composting is increasingly used as a preferred waste diversion management strategy for landscaping debris and other organic or compostable material in California;<sup>2</sup> and,

WHEREAS, more than 337,000 tons per year of the San Francisco waste stream is organic or compostable material;<sup>3</sup> and,

WHEREAS, in order for San Francisco to exceed the state mandated waste landfill diversion goals, nearly 80,000 tons per year of compostable materials in the City must be diverted from landfill to available composting facilities; <sup>4</sup>and,

WHEREAS, composters and processors in California handled at least six million tons of organic materials feedstock in 2000 and sold 47% of their product to agriculture and 37% to the horticulture (including landscaping) industry; <sup>5</sup> and,

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<sup>1</sup> California Public Resources Code, Section 41780-41851.

<sup>2</sup> California Integrated Waste Management Board. Assessment of California's Compost- and Mulch Producing Infrastructure. [http:// www.ciwmb.ca.gov/Publications/Organics/44201020.doc](http://www.ciwmb.ca.gov/Publications/Organics/44201020.doc)

<sup>3</sup> California Integrated Waste Management Board, Waste Characterization Study, San Francisco, CA 1996, CalRecovery, Inc. Final Report; Analysis of Diversion for the City and County of San Francisco for California;

<http://www.ciwmb.ca.gov/Profiles/Juris/JurProfile1.asp?RG=C&JURID=438&JUR=San+Francisco>

<sup>4</sup> City and County of San Francisco, Refuse Collection and Disposal Rate Process, Tonnage Projections, Exhibit 30, 2001 Rate Process.

WHEREAS, the City and County of San Francisco adopted an Integrated Pest Management Ordinance in 1996 mandating that San Francisco minimize its pesticide use and reduce the negative impact of pesticides on people and the environment<sup>6</sup>; and, WHEREAS, clopyralid (pronounced clo-PEER-uh-lid) is manufactured by Dow AgroSciences and is an active ingredient in a variety of pesticides products<sup>7</sup>; and WHEREAS, the use of products containing clopyralid is rapidly increasing in the state of California, from 16.5 lbs. in 1997 to 13,176 lbs in 2000;<sup>8</sup> and, WHEREAS, clopyralid is a persistent pesticide used primarily on lawns and in agriculture to kill targeted broad-leaf plants, such as dandelions, clover and thistle;<sup>9</sup> and, WHEREAS, clopyralid is extremely toxic to many non-target plants including broadleaf ornamentals and vegetables at rates as low as 1 part per billion (ppb)<sup>10</sup>; and, WHEREAS, clopyralid has been found to persist through the composting process at levels well in excess of amounts that can damage plants at composting facilities, such as in the states of Washington<sup>11</sup>, Pennsylvania, and Ohio<sup>12</sup> and in 13 out of 20 compost facilities in California<sup>13</sup>; and,

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<sup>5</sup> California Integrated Waste Management Board. Assessment of California's Compost-and Mulch-Producing Infrastructure, June 2001 <http://www.ciwmb.ca.gov/Publications/Organics/44201020.doc>

<sup>6</sup> San Francisco Integrated Pest Management Ordinance. Chapter 39 of San Francisco Administrative Code.

<sup>7</sup> Washington State University, Clopyralid Contaminated Compost Fact Sheet, December 27, 2001, <http://cahene.wsu.edu/clopyralid.htm>

<sup>8</sup> California Environmental Protection Agency, Department of Pesticide Regulation, Pesticide Use Reporting. <http://www.cdpr.ca.gov/docs/pur/purmain.htm>

<sup>9</sup> Washington State Department of Agriculture, Clopyralid in Compost Facts, January 2000, <http://www.wa.gov/agr/Clopyralid%20f.pdf>.

<sup>10</sup> Fauci, Bezdicsek, Cadwell, Finch; Development of Plant Bioassay to Detect Herbicide Contamination of Compost at or Below Practical Analytical Detection Limits, Bull. Environ. Contam. Toxicol. (2002) 68:79-85, 2002 Springer-Verlag New York Inc

<sup>11</sup> Washington State University, Clopyralid in Compost. <http://css.wsu.edu/compost/clopyralid/clopyralid.htm>

<sup>12</sup> Bezdicsek, Fauci, Caldwell, Finch, Lang; Persistent Herbicides in Compost, BioCycle, July 2001

<sup>13</sup> Anateck Labs, Inc. Certificate of Analysis- EPA 8151 Modified, February 26, 2002

WHEREAS, ten weeks after a pesticide application, clopyralid levels on grass clippings were found to be 150 ppb<sup>14</sup>; and,

WHEREAS, the labeling precautions to keep clopyralid out of compost is probably insufficient to protect composting facilities because damaging levels of clopyralid may persist for months after application or composting<sup>15</sup>; and,

WHEREAS, since 65,000 cubic yards of compost produced at the City of Spokane, Washington composting facility has been unmarketable due to clopyralid contamination, the facility has stopped taking in new material to compost<sup>16</sup>; and,

WHEREAS, there is potential significant economic impact to the composting industry as illustrated by the fact that the State of Washington had to pay compost users more than \$250,000 in damages resulting from the use of clopyralid contaminated compost from Washington State University<sup>17</sup>; and,

WHEREAS, the Washington State Department of Agriculture issued an emergency rule on March 1, 2002 immediately banning the use of clopyralid that are persistent in compost on lawns and turf for a 120 day period, and plans to create a permanent rule that may include additional restrictions<sup>18</sup>; and,

WHEREAS, the Integrated Pest Management Ordinance does not currently include any products including clopyralid but does not explicitly ban products containing clopyralid on the “Approved List of Reduced Risk Pesticides”<sup>19</sup>; and,

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<sup>14</sup> Miltner, Vary, Cogger, Rinehart, Stahnke; Department of Crop and Soil Sciences, Washington State University Puyallup Research Extension Center; Clopyralid Dissipation in Turfgrass Clippings: effects of formulation and clipping management

<sup>15</sup> Bezdicek, Fauci, Caldwell, Finch, Lang; Persistent Herbicides in Compost, BioCycle, July 2001

<sup>16</sup> Telephone conversation with Damon Taam, Solid Waste System Manager, Spokane County, Washington, March 15, 2002.

<sup>17</sup> Bezdicek, David; Response to Herbicide Contamination, Biocycle Conference, West Coast Conference 2002, San Francisco, Cathedral Hill Hotel; March 4, 2002.

<sup>18</sup> Washington State Department of Agriculture Emergency Rule Restricting the Use of Clopyralid, <http://www.wa.gov/agr/clopyralid.htm>

<sup>19</sup> Integrated Pest Management Program Report Reduced Risk Pesticide List 2000, San Francisco Integrated Pest Management Program. <http://www.ci.sf.ca.us/ipm/list2000/coverhtm#list2000>

WHEREAS, there are alternatives to clopyralid to control broadleaf plants that include other chemical pesticides as well as pesticide free cultural practices for turf maintenance<sup>20</sup>; therefore, be it

RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to explicitly ban the use of clopyralid and other pesticides found to be persistent in compost by all City Departments; and, be it

FURTHER RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to write a letter to the California Department of Pesticide Regulation, the United States Environmental Protection Agency, and the United States Department of Agriculture urging a ban of the use of clopyralid (and any other pesticides that are persistent in compost) and requiring manufacturer compensation of compost producers and compost product users for damages suffered due to the use of clopyralid or other pesticides that are persistent in compost and that persistence in compost be a determining factor for pesticide registration; and, be it

FURTHER RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to write a letter to Dow Chemical Company asking that the company no longer manufacture or distribute clopyralid and other pesticides that are persistent in compost, exercise precaution in evaluating persistence in compost prior to the introduction of pesticides on the market, and to compensate compost producers and compost product users for damages suffered due to the use of clopyralid or other persistent pesticide contaminated compost; and; be it

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<sup>20</sup> Renfrow, Phil; City of Seattle Pesticide Use Reduction Program Coordinator Alternatives to Clopyralid and Cultural Practices for Turf; November 11, 2001

FURTHER RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to encourage the California Integrated Waste Management Board to support banning the use of Clopyralid and any other compost persistent pesticides and requiring manufacturer compensation of compost producers and compost product users for damages suffered due to the use of clopyralid or other persistent pesticide contaminated compost, to educate pesticide users and compost users on pesticide persistence in compost, to develop a list of environmentally preferable alternatives to clopyralid containing products, to encourage and support routine testing of compost facilities for contamination of clopyralid or other persistent pesticides in order to ensure the economic viability of composting as a waste management strategy in California; and, be it

FURTHER RESOLVED, that the Commission on the Environment urges the Mayor and the Board of Supervisors of the City and County of San Francisco to support proposed state legislation, such as Sen. Keeley's AB2356<sup>21</sup>, that would ban the use of clopyralid (and any other compost persistent pesticides) and require manufacturer compensation of compost producers and compost product users for damages suffered due to the use of clopyralid or other persistent pesticide contaminated compost.

*I hereby certify that this resolution was adopted by the Commission on the Environment at its special meeting on March 19, 2002.*

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*Kristal R. Aliyas*  
*Commission Secretary*

VOTE:

Ayes: Commissioners Bingham, Bradford-Bell, Evans, Hayes, Rodriguez and Shah  
Noes: None  
Absent: Commissioner Werbe

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<sup>21</sup> Keeley, Fred; Assembly Bill; [http://www.leginfo.ca.gov/pub/bill/asm/ab\\_2351-2400/ab\\_2356\\_bill\\_20020221\\_introduced.pdf](http://www.leginfo.ca.gov/pub/bill/asm/ab_2351-2400/ab_2356_bill_20020221_introduced.pdf)