

Meeting the Agricultural Challenge

Introduction

The California Integrated Waste Management Board (CIWMB) works extensively in agriculture, more so than one might expect. California's multi-billion dollar agriculture industry is a major market for compost and mulch products made from organic materials diverted from landfills. Commercial growers used about two million tons of these urban-derived products in 2000. Compost and mulch provide benefits such as soil enhancement, weed suppression, slow release of nutrients, and water conservation, and are tools in moving towards more sustainable agricultural practices.

Compost and mulch use are tools in preventing agricultural pollution, a view shared by CIWMB staff and other Cal/EPA departments. According to the Department of Toxic Substances Control, "...pollution prevention needs to be broadened to encompass sustainable agricultural practices that result in multiple environmental benefits. These practices include integrated pest management, use of cover crops, and compost ..."¹ Above all, the CIWMB is concerned that agriculture does not become a dumping ground for recycled organic materials.

Agriculture-Related Activities

CIWMB activities in promoting agricultural markets and preventing pollution have led to numerous partnerships with commercial growers, University of California Cooperative Extension, resource conservation districts, nonprofit organizations, and commodity groups. They also have led to collaborations with State agencies such as the State Water Resources Control Board, Department of Pesticide Regulation, Department of Toxic Substances Control, Air Resources

Board, and Department of Food and Agriculture (CDFA). As a result of CIWMB's many activities related to agriculture, urban-derived compost and mulch have made in-roads into the agricultural market.

The following is a summary of past and ongoing CIWMB-funded projects, programs, and information of note to commercial growers in California.

Compost Demonstration Projects

Nine compost demonstration projects involving commercial growers have been funded throughout California. Most of the final reports from past successful projects as well as numerous fact sheets are available from www.ciwmb.ca.gov/Organics/ or by contacting the CIWMB publications clearinghouse at 1-800-CA-WASTE (Calif. only) or (916) 341-6306.

Erosion Control/Nonpoint-Source Pollution Projects

Four erosion control and nonpoint-source pollution projects within California have been funded to date. Three of these projects involve commercial grape and citrus growers using mulch. A map showing the approximate location of each agricultural and erosion control project with a short description can be found at www.ciwmb.ca.gov/Organics/GreenTeam/Target6/ProjMap.htm.

Farm and Ranch Cleanup

The CIWMB provides \$1 million in grants each year for the purpose of farm and ranch cleanup. Interested local governments can apply for a grant any time during the year at www.ciwmb.ca.gov/LEACentral/grantsloans/farmranch/.

Used Oil Program

CIWMB used oil recycling program staff disseminates information at its exhibit booth for commercial growers attending major agricultural events. More information is available at www.ciwmb.ca.gov/usedoil/.

¹ DTSC Pollution Prevention Advisory Committee, "Agribusiness Pollution Prevention Problem Statement & Recommendations," draft, August 20, 2001.

Outreach

The CIWMB is a featured sponsor of the acclaimed public television series, *California Heartland* www.ciwmb.ca.gov/Organics/Farming/. CIWMB staff also participates in numerous agricultural trade shows, including Eco-Farm, the Tulare Farm Show, and UC Cooperative Extension and resource conservation district workshops. Through these efforts, the CIWMB is able to reach thousands of people and educate them about compost and mulch use as well as the 3 Rs of “Reduce, Reuse, and Recycle.”

Composting Regulations

Over 100 California composting operations are regulated by the CIWMB (www.ciwmb.ca.gov/Regulations/Title14/). Many of these supply bulk material to commercial growers. Probably an equal number of processors (e.g., operators that chip and grind woody materials, but do not compost them) also furnish growers with mulch. CIWMB composting regulations are designed to protect public health and safety and the environment while increasing business opportunities for organic material processors. The regulations also allow organic materials to be used for on-farm composting without a permit, provided the product is not sold, but with provisions that preclude importing contaminated materials onto agricultural land.

List of Compost and Mulch Suppliers

CIWMB staff annually updates a voluntary listing of compost and mulch suppliers at www.ciwmb.ca.gov/Organics/SupplierList/ that includes California Compost Quality Council (CCQC) registered composting operations. CCQC provides third-party verification relative to compost quality guidelines for many of the composting operations listed. For more information on CCQC, visit its Web site at www.ccqc.org/.

Vermicomposting

Information about composting with worms can be found at www.ciwmb.ca.gov/Organics/Worms/.

On-Farm Composting

The CIWMB encourages on-farm composting of agricultural material combined with urban-derived

material. CIWMB staff provides resource information during organic outreach events and at www.ciwmb.ca.gov/Organics/Farming/OnFarm.htm.

Sustainable Agriculture

Sustainable agricultural practices go hand-in-hand with compost use since both focus on prudent use of natural resources. CIWMB staff has partnered with nonprofit organizations to promote compost and mulch use as a sustainable agricultural practice (www.ciwmb.ca.gov/Organics/Farming/SustAg.htm).

Future Activity

In addition to the activities described above, CIWMB staff is also working on “conversion” technologies that can use organic materials to produce energy, ethanol, and other products (www.ciwmb.ca.gov/Organics/Conversion/). These non-burn technologies may open additional markets for urban-derived and agricultural materials in the future. They also may result in environmental benefits such as cleaner air considering that some agricultural by-products are still open-air burned in California’s fields.

CIWMB recently approved about \$26,000 to supplement the annual CDFA Fertilizer Research and Education Program (FREP) solicitation. The funds will be used to encourage FREP proposals professing to demonstrate the value of urban-derived material in agriculture. This partnership will address compost and mulch use to a receptive agricultural audience.

Contact information

Information on the use of compost or mulch in agriculture is available from CIWMB’s Organics Outlook Web site at www.ciwmb.ca.gov/organics/ or by contacting staff in CIWMB’s Organic Materials Management Section at (916) 341-6620.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, Flex Your Power and visit www.consumerenergycenter.org/flex/index.html.