



Compost Emissions Work Group

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Background:

Composting is a biochemical process that breaks down organic wastes into marketable products (soil amendments, animal bedding, and alternative daily cover at landfills); volatile organic compounds (VOCs); heat; and water. Composting uses wastes from forest management, landscaping, agricultural processing, crop harvesting, food consumption, and emergency animal mortalities. Composting can be conducted outdoors or in partially or fully enclosed facilities.



Over 25 percent or approximately 10 million tons of organics are sent to landfills each year in California. The anaerobic decomposition of these wastes result in the emission of methane (a greenhouse gas). Composting of organic waste material has become an important method of managing California's solid waste stream. Composting diverts biomass residue from landfills. This reduces the need for landfill capacity and the production of GHG emissions.

Currently, there are more than 400 compostable material handling facilities **permitted** by the California Integrated Waste Management Board (CIWMB). Among these include confined animal facilities, landfills, and waste water treatment facilities.

Composting is a source of GHGs, VOCs / reactive organic gases (ROG), particulate matter, and ammonia (NH₃). The California Air Resources Board's (ARB) 2008 **emissions inventory estimates** indicate that ROG emissions from composting were approximately 38.02 tons per day. These emissions accounted for less than 1 percent of the total ROG emissions in California.

Presently, Antelope Valley Air Pollution Control District, Mojave Desert Air Quality Management District, San Joaquin Valley Air Pollution Control District, and South Coast Air Quality Management District have proposed or **adopted rules** focused on the control of VOC, NH₃, and PM emissions from composting facilities.

Assembly Bill 32, the California Global Warming Solutions Act of 2006 (AB 32; Statutes of 2006, chapter 488), creates a comprehensive, multi-year program to reduce GHG emissions to 1990 levels by the year 2020. AB 32 requires that the ARB develop GHG reduction strategies that do not interfere with existing air pollution control measures. The AB 32 **Scoping Plan** contains the main strategies California will use to reduce the GHGs that cause climate change. The Scoping Plan (**Measure No. RW-3**) commits ARB staff to work with the CIWMB, the California Department of Food and Agriculture, the Department of Transportation, and others to provide direct incentives for the use of compost in agriculture and landscaping.

Proposed Rule 4566: Organic Material Composting Operations

- **Final Draft New Rule 4566** (Organic Material Composting Operations) August 18, 2011.
- **Archived Workshop**

