

EPA Regional Offices

Region 1

U.S. EPA—Region 1
J.F.K. Federal Building
Boston, MA 02203
(617) 565-3715

Region 2

U.S. EPA—Region 2
26 Federal Plaza
New York, NY 10278
(212) 264-2657

Region 3

U.S. EPA—Region 3
841 Chestnut Street
Philadelphia, PA 19107
(215) 597-9800

Region 4

U.S. EPA—Region 4
345 Courtland Street, NE
Atlanta, GA 30365
(404) 347-4727

Region 5

U.S. EPA—Region 5
230 South Dearborn Street
Chicago, IL 60604
(312) 353-2000

Region 6

U.S. EPA—Region 6
First Interstate Bank Tower
1445 Ross Avenue
Dallas, TX 75270-2733
(214) 655-6444

Region 7

U.S. EPA—Region 7
726 Minnesota Avenue
Kansas City, KS 66101
(913) 551-7000

Region 8

U.S. EPA—Region 8
Denver Place (811WM-RI)
999 18th Street, Suite 500
Denver, CO 80202-2405
(303) 293-1603

Region 9

U.S. EPA—Region 9
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-2095

Region 10

U.S. EPA—Region 10
1200 Sixth Avenue
Seattle, WA 98101
(206) 442-1200

U.S. Environmental Protection Agency
(OS-305)
401 M Street SW
Washington, DC 20460

Official Business
Penalty for Private Use \$300



United States
Environmental Protection
Agency

Solid Waste and
Emergency Response
(OS-305)

EPA/530-SW-91-009
May 1991

Office of Solid Waste

Environmental Fact Sheet

YARD WASTE COMPOSTING

Across the nation, composting is gaining increased attention as an environmentally sound way to manage yard wastes. Yard wastes are such materials as leaves, grass clippings, brush, and tree prunings. Many communities and 12 states have banned yard wastes from landfills. Composting diverts yard wastes from landfills and combustors. The U.S. Environmental Protection Agency (EPA) recommends composting yard wastes. Not only is composting sensible from an environmental perspective, it also effectively converts yard wastes into a useful soil additive or mulch.,

What Are the Facts About Yard Wastes?

Yard wastes account for nearly a fifth (over 31 million tons) of all garbage generated in the U. S. each year, making yard wastes the second largest component (by weight) of the municipal solid waste stream. The amount of yard waste generated varies considerably from region to region, during different seasons, and from one year to the next. In fact, during peak months (primarily summer and fall), yard wastes can represent as much as 25 to 50 percent of municipal solid waste.

Why Not Put Yard Wastes in Landfills?

Since these materials are relatively clean and biode-

gradable, disposal in landfills may be unnecessary and wastes space. In addition, as yard wastes decompose in landfills, they generate methane gas and acidic leachate. Methane is a colorless, explosive gas that is released as bacteria decompose organic materials in landfills. If methane is not controlled at a landfill, it can seep underground and into nearby buildings, where it has the potential to explode. Yard wastes also contribute acidity that can make other waste constituents more mobile and therefore more toxic.

Yard wastes also are generally unsuitable for combustion in incinerators due to their high moisture

content, which can inhibit complete burning. When burned, yard wastes emit certain gases which contribute to the formation of smog-causing nitrogen oxides.

Why Not Burn Leaves And Other Yard Wastes?

Burning leaves and other yard wastes pollutes the air and can lead to uncontrolled fires. Leaf smoke can make breathing difficult for people who suffer from asthma, emphysema, chronic bronchitis, or allergies. A number of states currently ban leaf burning, and some communities either ban leaf burning or restrict when it can take place.

What Is Composting?

Composting is the controlled decomposition of organic matter by microorganisms (mainly bacteria and fungi) into a humus-like product. Many home gardeners have created compost piles in their backyards. Towns and cities have set up community-wide composting facilities that furnish the finished compost to a variety of users.

How Can Compost Be Used?

Compost can be used for a variety of gardening projects. It can enrich gardens, improve the soil around trees and shrubs, and be used as a soil additive for houseplants and planter boxes. Compost can enhance soil texture, increase the ability of the soil to absorb air and water, suppress weed growth, decrease erosion, and reduce the need to apply chemical fertilizers and peat moss. Following are some other successful uses of compost:

- Farmers use compost for enhancing crops and for sod farms.
- Landscapers use compost as a soil amendment and for decorative purposes at properties, golf courses, and athletic fields. Landscapers also use compost

to cover landfills and carry out reclamation projects.

- Nurseries use compost for enhancing plant and forest seedling crops in reforestation projects.
- Public agencies use compost for landscaping highway median strips, parks, recreational areas, and other public property.

What Materials Can Be Composted?

Yard wastes such as leaves, grass, prunings, weeds, and remains of garden plants all make excellent compost. To speed the composting process, woody yard wastes should be clipped and sawed down, or run through a shredder. Vacuum cleaner lint, wool and cotton rags, sawdust, shredded newspaper, and fireplace ashes also can be composted. Although many foods can be composted, you should check with your local Board of Health to see if any sanitary code restrictions apply to food composting in your area. Do not compost meats, dairy foods, fats, oil, or grease.

How Can I Set Up A Compost Pile?

Composting is easy. You can set up a compost pile in a corner of your yard with few supplies. Choose a level

spot about three-feet square near a water source and preferably out of direct sunlight. Clear the area of sod and grass. If you build a composting bin, be sure to leave enough space for air to reach the pile. Materials such as chicken wire, scrap wood, or cinder blocks can be used to build the bin. One removable side makes it easier to tend to the pile.

Place coarse brush at the bottom of the pile to allow air to circulate. Then add leaves, grass, weeds, etc. You may layer the yard wastes with soil, if you want. Keeping the pile moist and turning it every few weeks will help speed up the natural decomposition process. In dry weather, sprinkle water on the pile, but don't let it get too soggy. Don't be surprised by the heat of the pile or if you see worms, both of which are just part of the process. In most climates, the compost is done in three to six months, or when it becomes a dark crumbly material that is uniform in texture.

Can Christmas Trees Be Used?

Many communities have begun programs to reuse the more than 30 million trees discarded each year after the holiday season. The trees are picked up at

the curb or collected at dropoff centers through the second week of January. Then they are ground into small pieces by chippers, and used as mulch in landscaping. To prepare your tree for reuse, carefully remove the ornaments, especially strands of tinsel, and any plastic wrapping or other materials used to transport the tree. You can also chip the tree yourself and use the mulch in your own yard.

How Can I Learn More About Composting?

EPA has developed several publications related to composting. EPA recently issued a booklet entitled *The Environmental Consumer's Handbook* that describes how to set up a backyard

compost pile. The *Handbook* also contains over 75 practical tips for reducing and recycling solid waste. Another publication, the *Decision-Maker's Guide to Solid Waste Management*, devotes an entire chapter to compost. This *Guide* is targeted at local government decision-makers, and contains solutions to many solid waste management problems. Both of these publications are available at no cost.

Contact the RCRA Hotline. Call Monday through Friday, 8:30 a.m. to 7:30 p.m. EST. The national toll-free number is (800) 424-9346. For the hearing impaired, the number is TDD (800) 553-7672. Copies of these publications can also be obtained by writing: RCRA Information Center (RIC), U.S. Environmental Protection Agency, Office of

Solid Waste (OS-305), 401 M Street SW., Washington, DC 20460.

Another report for decision-makers, *Yard Waste Composting: A Study of Eight Programs*, is available for a fee from the National Technical Information Services (NTIS). Call (703) 487-4650 and ask for publication number PB90-163 114. EPA is also developing a *Guide to Composting* that will assist policy-makers in determining what type of composting they should promote in their community and in planning and operating compost facilities.

In addition, EPA has drafted a report entitled *Markets for Compost*, which provides information on markets and uses for compost. These two documents should be available in early 1991 from the Hotline.

