

AIR POLLUTION FROM HOUSEHOLD OPEN BURNING IN PENNSYLVANIA

Concerns about household open burning.

You may not think that burning household trash in a burn barrel contributes to air pollution, but think again.

A study conducted by the U.S. Environmental Protection Agency and the New York State Department of Health shows that burn barrel emissions from 2 – 40 households burning their trash daily in barrels can produce levels of toxic emissions comparable to a well-controlled 200 ton/day municipal incinerator. These chemicals can include acid vapors and dioxins.

Burn barrels also emit heavy metals, such as lead, cadmium, and chromium, as well as unhealthful levels of carbon monoxide. The closer you are to waste that is burning, the higher the risk of inhaling dangerous pollutants.

This may not have been the case 50 or even 25 years ago, when your parents or grandparents burned trash in a burn barrel. In the past, household waste consisted mostly of paper and glass. Today, metal cans, plastic packaging, plastic products, and other synthetic materials make up a large portion of society's waste. When burned, these items can emit toxic pollutants and contaminated soot particles into the air.

In addition to the health effects of breathing the pollutants, flying sparks and embers can easily lead to uncontrolled fires, posing a substantial threat to life and property.

What are the potential health effects of breathing the pollutants from burning trash?

The short-term effects are usually coughing or irritation of the respiratory tract and eyes. Smoke can be a vehicle for deep penetration of pollutants into the lungs.

Long-term exposure to these pollutants may lead to cancer and emphysema. Acid vapors can irritate the lungs and cause problems for people suffering from asthma and emphysema. Dioxins are linked to increased risks of cancer, delays in child development, and damage to the immune system.

How is household open burning regulated?

Pennsylvania law allows open burning of “domestic refuse” as long as the fire is on the property of a structure occupied solely as a residence by two families or less and when the refuse results from the normal occupancy of the structure. “Domestic Refuse” does not include such items as demolition waste, insulation, shingles, treated wood, paint, painted or stained objects or furniture, tires, mattresses, box springs, metal, insulating coating on wire, television sets and appliances, automobiles, automotive parts, batteries, PVC products, waste oil and other petroleum products.

Under state law, local officials have the authority to address the needs of their communities by enacting open burning ordinances for household waste with requirements that are equal to or more stringent than state regulations. Municipal ordinances cannot be less stringent than the state requirements.

Many communities across the Commonwealth have enacted open-burning ordinances that restrict household open burning. Many of these are based on a model ordinance that DEP has developed. Upon request, DEP can provide a copy of the model ordinance and copies of actual enacted ordinances. DEP can also provide copies of various studies about open burning.

What alternatives do I have to open burning?

Because of the potential health and fire risks of open burning, DEP strongly recommends that you recycle and reuse as much of your trash as possible or take it to a licensed landfill or municipal incinerator.

Instead of burning your trash, consider the following alternatives:

- **Reduce** – Buy products in bulk, which requires less packaging, thereby producing less waste. Buy only what you need.
- **Reuse** – Donate unused or unwanted items to local charities, have a yard sale, give the items to friends, or repair items when practical.

- **Recycle** – Contact your municipality or waste hauler to find out what materials are collected for recycling. Encourage them to collect additional materials.
- **Compost** – Turn leaves, yard waste, and kitchen fruit and vegetable scraps into a soil amendment by starting your own compost pile.
- **Grasscycling** – Leave grass clippings where they fall. The clippings decompose and act as a natural fertilizer, reducing the need to buy commercial fertilizer.
- **Buy Recycled** – Buying recycled products closes the loop on the recycling process and creates the market to help recycle and reuse materials that would otherwise be disposed in landfills or burned.

Is recycling required anywhere?

Your municipality may be required to have a residential waste recycling program under the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101). If so, it is illegal under Act 101 for you to burn the kinds of waste and materials that your municipality requires residents to recycle. In communities that are required to recycle residential waste under Act 101, leaf waste must also be separated from other municipal waste. Leaf waste should then be composted by either the resident or the municipality.

To determine if you are required to recycle specific materials or separate out your leaf waste, call your local municipal office, your County Recycling Coordinator, or your DEP Regional Planning and Recycling Coordinator (DEP regional office phone numbers are below).

What can I do to limit open burning in my community and encourage recycling?

Work with your local elected officials to enact an open-burning ordinance that is as fair as possible to everyone. Communities that are required to recycle under Act 101 or have a recycling grant must have an open-burning ordinance that prohibits the burning of the materials that the municipality recycles. Composting of leaves and yard waste should be encouraged.

Contact your DEP regional recycling coordinator or your local county recycling coordinator for information about starting a municipal recycling and composting program. Grants are available to assist municipalities that qualify for funding to start and maintain recycling programs.

Where can I get more information about open burning?

Information on open burning is available on DEP's Open Burning Web site at www.depweb.state.pa.us, keyword: Open Burning. You can also call DEP's Bureau of Air Quality at 717-787-9702.

Where can I learn more about recycling, composting, and grasscycling?

For more information, visit www.depweb.state.pa.us, keyword: Recycling.

DEP Regional Offices

Northwest Region

230 Chestnut St.
Meadville, PA 16335-3481
814-332-6945

Counties: *Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren*

Northcentral Region

208 W. Third Street, Suite 101
Williamsport, PA 17701-6448
570-327-3636

Counties: *Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union*

Northeast Region

2 Public Square
Wilkes-Barre, PA 18711-0790
570-826-2511

Counties: *Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming*

Southwest Region

400 Waterfront Drive
Pittsburgh, PA 15222-4745
412-442-4000

Counties: *Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland*

Southcentral Region

909 Elmerton Avenue
Harrisburg, PA 17110-8200
717-705-4700

Counties: *Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York*

Southeast Region

2 East Main St.
Norristown, PA 19401
484-250-5900

Counties: *Bucks, Chester, Delaware, and Montgomery*

Allegheny County and Philadelphia County each have their own air quality program. For more information about air quality in Philadelphia County, call Air Management Services at 215-685-7572. In Allegheny County, call the Allegheny County Health Department at 412-578-8103.