



Learn Not to Burn

Successful Alternatives to Backyard Trash Burning



What is Backyard Burning?

Backyard burning (BYB) is the uncontrolled combustion of household waste in barrels, open pits, wood stoves, or fireplaces. Although people have used burning as a practice of waste management for years, it poses a risk to both human and environmental health.

Why is it Harmful?



BYB is a significant source of dioxin and other toxic emissions due to the low burning temperatures, poor air circulation, and the presence of chemicals found in household garbage. Dioxins, a class of chemicals, are toxic even at extremely low levels and have been linked to serious health problems in humans. Dioxins settle on plants, soil, and water where they are incorporated in our food system and may impact our health.

Burning garbage also releases particulate matter (soot and ashes), which can contribute to eye and throat irritation and breathing problems such as asthma, especially in children and the elderly.

BYB also poses a significant fire hazard, as embers from burn barrels are blown and may be reignited. Wisconsin and Minnesota estimate that 40% of wildfires each year are caused by debris burning.

What Has Been Done to Address Backyard Burning?

The U.S. Environmental Protection Agency (EPA) and our partner organizations have established a three-pronged initiative to reduce BYB, which involves:

- Educating the public about the hazards related to BYB;
- Offering incentives to stop burning and begin using alternative disposal methods;
- Supporting development and enforcement of BYB regulations.



Many communities across the nation have successfully reduced BYB through one or more of these actions. To help others achieve reductions, EPA has collected a set of case studies describing how some communities are taking steps to reduce BYB in their backyards.



Case Study 1: Education & Outreach-Air Defenders

“Air Defenders: The Quest for Clean Air” is an educational resource on BYB, air quality, and respiratory health developed by the State of Wisconsin. It’s designed to help health officials, community educators, and teachers create fun and valuable hands-on classroom lessons for students through a multi-media educational program. Students learn by completing activities in science, health education, and music that meet national academic standards. Visit www.airdefenders.org for more information and to view sample materials.





Case Study 2: Incentives & Disposal Alternatives-Chisago County, MN



In the 1990's, Chisago County, Minnesota, began the "Burn Barrel Buy Back" (4B's) Program to address the problem of BYB. The program offered a financial incentive of six months of half price trash service in exchange for a burn barrel taken out of service. This program was made possible by a \$10,000 grant from the Minnesota Office of Environmental Assistance. In addition, half of the cost was subsidized by trash haulers, who agreed to pick up burn barrels from new customers.

From 1996 to 1999, 170 households took advantage of the 4B's Program. The percent of the population disposing of garbage by burning or burying was reduced from 13% to 3%. The program was promoted by an extensive educational campaign that included news releases and advertisements in local newspapers, an 8-minute video, and displays at local events.



Case Study 3: Regulation & Enforcement-Fond du Lac Reservation, MN

The *Fond du Lac Band of Lake Superior Chippewa Waste Management and Recycling Ordinance* was first created and adopted in May 1993. The rule requires that solid waste be delivered to waste management facilities and requires recyclable material to be separated from mixed waste and delivered to a recycling facility or arranged to be collected by operators of recycling facilities. Burning of any waste is prohibited on the reservation. A permit from the Fond du Lac Forestry Department is required for some forms of burning; the permits strictly prohibit the burning of wastes with the exception of logs, brush, leaves, etc.

Eight conservation officers of the Fond du Lac Reservation and certain ceded territory areas have the capacity to enforce the ordinance, as do law enforcement officers. Violators receive a warning upon first offense and are given five days to correct the violation. Citations are issued for non-compliance after five days and require the violator to appear in Tribal Court. The fine for illegal burning of waste is \$150. This system has worked for years to enforce the ordinance.



What You Can Do



These are examples of successful, cost-effective measures communities have taken to reduce BYB. The benefits of taking action against BYB extend beyond reducing health problems. In addition to being a nuisance to neighbors, BYB is a major source of property fires and can hinder state and municipal efforts to meet air quality standards. For more examples and ideas on how to reduce backyard burning, please see our full list of community case studies in the *Learn Not to Burn* Toolkit.

Your community can do something, too!

Great
Lakes
National
Program
Office



For more information about reducing backyard burning, visit www.openburning.org.

For additional EPA assistance, contact Erin Newman at newman.erin@epa.gov or (312) 886-4587.