

Did You Know

- The composition of garbage has dramatically changed in the last generation: Far **more plastics** are in it **than 50 years ago**.
- Chemicals exist even in paper and cardboard, so even the **seemingly harmless** burning of these items creates pollution.
- The **Habit** of putting a match to garbage spans several generations.
- **Burning garbage** in burn barrels is far **more hazardous** than previously thought.
- **Most materials** thrown into a burn barrel **are recyclable** (e.g. paper, milk jugs, cardboard)
- **Burn barrels** account for the single most frequent **cause of uncontrolled fires**. (Minnesota DNR)
- Burning garbage is against the law in most areas of Minnesota (MPCA)



Focus on Dioxin

- **Dioxin** is the key concern of the risks posed by garbage burning.
- **Dioxin** is a potent **human carcinogen (cancer causing)** that is especially harmful for pregnant women, children, and the elderly.
- **Dioxin** is also an **endocrine disrupter** and can cause reproductive, developmental, and immunological problems in humans and animals.
- United States Environmental Protection Agency research shows that burn barrels are the #1 source of **dioxin** in the U.S.

Did You Know

Just one burn barrel can produce as much or more dioxin as a full scale municipal waste combustor that burns 200 tons of garbage per day. *Source: Inventory of Sources of Dioxin in the U.S., "Mar. 01*



KICK THE HABIT!



HERE'S HOW TO START...

- **Recycle More:** 40% of all garbage is recyclable. Rural residents can use area recycling sheds for FREE!
- 30% of all garbage is compostable. Composting food waste can become a healthy additive to your garden.
- Check into garbage service. It may be more affordable than you think.

Dioxin Exposure Potential



How are we exposed to Dioxins from burning garbage at home? Dioxin from the smoke produced by burning garbage in a burn barrel can accumulate in the nearby soil and vegetation. It is also dispersed into the air where it can travel great distances, settling on crops, and surface water—eventually winding up in the food that we eat as animals take in dioxin contaminated food sources.

Environmental Impacts From Burning Garbage

- **Low-temperature fires**—such as those in burn barrels—receive very little oxygen and produce large amounts of smoke.
- **Under these conditions a variety of toxic substances are released:** including heavy metals, particulates, and dioxin.
- **Virtually all the pollutants are released into the air, and are close to ground level where they can easily be inhaled.**
- **Toxic substances in the ash can settle on the ground and be taken in by**

Frequently Asked...

Incinerators burn garbage why can't I?

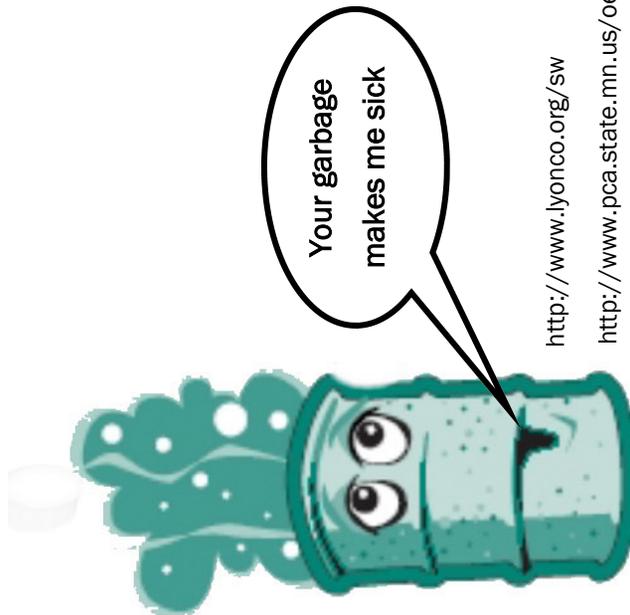
Burn barrel fire temperatures rarely exceed 500°F, whereas garbage incinerators operate at temperatures near 2200°F to insure complete combustion of the refuse and pollutants.

We've burned our garbage for years—*What's the big deal?*

Modern garbage is a mix of plastics and other synthetics that release a hazardous mixture of carcinogens and other toxins when burned.

What is emitted when garbage burns?

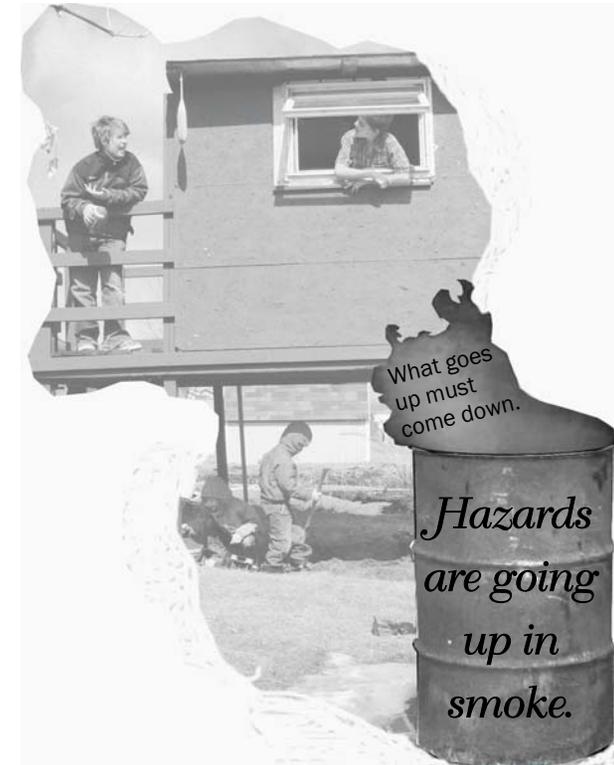
Besides ash, furans, dioxins, and other halogenated hydrocarbons, burn barrels give off high levels of carbon monoxide, carbon dioxide, sulfur dioxide, and heavy metals such as lead, arsenic, mercury, and cadmium.



<http://www.lyonco.org/sw>

<http://www.pca.state.mn.us/oea/reduce/burnbarrel.cfm>

Burn Less...



...Breathe Better

For more information
contact your local
Solid Waste Officer