

Welcome to the Tuesday Tree Huggin' Tip!



Tip 20: Banish Styrofoam! Embrace Renewable Alternatives!

What is Styrofoam anyway?

Polystyrene is a petroleum-based plastic made from the styrene monomer. Most people know it under the name Styrofoam, which is actually the trade name of a polystyrene foam product used for housing insulation. Polystyrene is a light-weight material, about 95% air, with very good insulation properties and is used in all types of products from cups that keep your beverages hot or cold to packaging material that keep your computers safe during shipping.

Why not use it?

- The biggest environmental **health concern** associated with polystyrene is the danger associated with Styrene, the basic building block of polystyrene. Styrene is used extensively in the manufacture of plastics, rubber, and resins. About 90,000 workers, including those who make boats, tubs and showers, are potentially exposed to styrene. Acute health effects are generally irritation of the skin, eyes, and upper respiratory tract, and gastrointestinal effects. Chronic exposure affects the central nervous system showing symptoms such as depression, headache, fatigue, and weakness, and can cause minor effects on kidney function and blood. Styrene is classified as a possible human carcinogen by the EPA and by the International Agency for Research on Cancer (IARC).
- A 1986 EPA report on solid waste named the polystyrene manufacturing process as the **5th largest creator of hazardous waste**. The National Bureau of Standards Center for Fire Research identified 57 chemical byproducts released during the combustion of polystyrene foam. The process of making polystyrene pollutes the air and creates large amounts of liquid and solid waste.
- **Toxic chemicals leach** out of these products into the food that they contain (especially when heated in a microwave). These chemicals threaten human health and reproductive systems.
- These products are made with petroleum, a **non-sustainable** and **heavily polluting** resource.
- The use of hydrocarbons in polystyrene foam manufacture releases the hydrocarbons into the air at ground level; there, combined with nitrogen oxides in the presence of sunlight, they form tropospheric ozone -- a serious **air pollutant** at ground level. According to the EPA (U.S. Environmental Protection Agency) more than 100 million Americans currently live in areas that fail to meet air quality standards for ozone. California, the Texas Gulf Coast, the Chicago-Milwaukee area, and the Northeastern U.S. all have "serious ozone air quality problems,"

according to EPA. High levels of ozone have been linked to respiratory and immune system diseases in both humans and animals.

Why Use Alternatives?

- Post-consumer recycled paper, bamboo, corn plastics, etc. are easily renewable resources.
- All of these products biodegrade when composted.
- Paper products can be recycled at most people's doorstep where community recycling is in place.
- In 1995, 40% of all US paper was recycled, including 32.6 million tons of paper & paperboard. (EPA)
- Every ton of 100% Post-consumer waste recycled paper products you buy saves:
 - 12 trees
 - 1,087 pounds of solid waste
 - 1,560 kilowatts of energy (2 months of electric power required by the average US home)
 - 1,196 gallons of water
 - 1,976 lbs. of greenhouse gases (1,600 miles traveled in the average US car)
 - 3 cubic yards of landfill space
 - 9 pounds of HAPs, VOCs, and AOXs combined
 - 390 gallons of oil

So, please pass over those cheap Styrofoam plates and cups and reach for the reasonably priced paper, corn plastic, or bamboo alternatives. Target, Giant, Corporate Express, and even CVS, have all jumped on the Green advertising wagon and are now offering these products far and wide. This small choice really does make a difference!

Yours in crunchiness,

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¹ Adapted from <http://www.earthresource.org/campaigns/capp/capp-styrofoam.html> ; accessed October 27, 2009.