

Summer Ozone Awareness: Take the Pledge to Chill

It's been a pretty hot summer so far, and hotter temperatures mean cranking up the A/C for many folks. But cold indoor relief comes at a cost both financially and for the environment—air conditioners consume large amounts of energy (greenhouse gas producing coal-powered electricity in most cases). These energy hogs also contain the refrigerants chlorofluorocarbons (CFCs, also trademarked as Freon®) or halogenated chlorofluorocarbons (HCFCs). CFCs destroy the ozone layer in the Earth's upper atmosphere, which helps protect us from ultraviolet (UV) radiation. There is a gradual phase-out of CFCs, but it will be 2020 before U.S. production and importation end entirely.

Meanwhile, what can you do to keep these ozone-depleting refrigerants out of our atmosphere? First, make sure your air conditioner is in good-working condition. Have your equipment serviced regularly and promptly fix any leaks. When your A/C finally quits on you, state law requires the refrigerant chemicals be removed by a company licensed to do so before recycling or disposal. Eco-Cycle DOES NOT accept appliances containing Freon®, CFCs or HCFCs. Any non-working/non-reusable air conditioners, heating systems, refrigerators, etc. should be recycled with a licensed company, such as Unwanted Appliances. For more information call 303-430-7142 or go to www.unwanted.com. Be sure to check out Eco-Cycle's Hard-to-Recycle Guide at www.ecocycle.org for other local certified removal companies or for places to donate your appliance if it's still in good working condition.

Unfortunately, that's not all you need to know about ozone: Ozone can be beneficial or detrimental for our health and for the environment, depending on its location in the atmosphere. While we need ozone in the Earth's upper atmosphere to protect us from UV radiation, ozone at ground level is a dangerous pollutant. Ground-level ozone is formed when volatile organic chemicals (VOCs) "cook" with nitrogen oxides in the presence of sunlight and heat. Major sources of these ground-level ozone precursors include exhaust from gasoline-powered vehicles and lawn equipment, industrial emissions, and chemical solvents like household paints, stains and solvents.

Ground-level ozone aggravates our respiratory systems, decreases lung function and may cause permanent lung damage. According to the Environmental Protection Agency (EPA), approximately one out of every three people is at risk for ozone-related health effects, including children, asthmatics, those with existing respiratory problems and people of all ages who actively work or exercise outdoors! So far this summer, we've had nearly 40 Ozone Action Alerts along the Front Range when increased ozone concentrations posed a danger to these sensitive groups or even exceeded federal health standards.

Ground-level ozone also damages plants and ecosystems. It interferes with the ability of plants to produce and store food, increasing their susceptibility to pests, severe weather and disease. Ground-level ozone also damages the aesthetic quality of the leaves of plants and trees and reduces crop and forest yields.

The good news is that by following a few simple steps, we can reduce this summertime pollution by following a few suggestions from the Regional Air Quality Council (RAQC) and the Colorado Department of Public Health and the Environment:

Limit driving, combine trips or use alternative transportation. According to RAQC, operating and refueling vehicles accounts for 35 to 50 percent of ozone formation in the Denver metro area.

Stop at the click and don't overfill at the pump. Refueling at dusk or at night is preferable because it reduces the amount of fuel vapors "cooking" in the midday sun.

Turn your gas cap until it clicks three times to ensure that harmful pollutants are not seeping out of your gas tank.

Avoid using gas-powered yard equipment on high ozone days. Let the grass grow for another day.

Avoid idling your vehicle for more than 30 seconds. Choose to go inside rather than sit in long drive-thru lines.

Painting, stripping and refinishing projects typically contain VOCs. Postpone using these products until later in the day to avoid morning and midday heat. Better yet, postpone until fall temperatures arrive and use low VOC water-based paints and stains.

Check out the Regional Air Quality Council at www.ozoneaware.org and sign the "Pledge to Chill" to reduce your contribution to summertime ozone pollution.

Together, we can cool down the planet and protect our health!

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