



THE CITY OF FITCHBURG'S IDLING REDUCTION CAMPAIGN

Fitchburg Resource Conservation Commission
Chair Diane Streck

Vehicle Exhaust Pollutants

- **Hydrocarbons** - Hydrocarbon emissions result when fuel does not burn or burns only partially. (When an engine idles, it is not running at its optimum operating temperature resulting in incomplete combustion.) Hydrocarbons react in the presence of nitrogen oxides and sunlight to form ground-level ozone, a major component of smog. Ozone irritates eyes, damages the lungs and aggravates respiratory problems. A number of exhaust hydrocarbons are also toxic, with the potential to cause cancer.
- **Nitrogen Oxides (NO_x)** – contribute to the formation of ozone and acid rain and water quality problems.
- **Carbon monoxide (CO)** is a product of incomplete combustion and occurs when carbon in the fuel is partially oxidized rather than fully oxidized to carbon dioxide (CO₂). Carbon monoxide reduces the flow of oxygen in the bloodstream and can impair mental functions and visual perception. It is particularly dangerous to persons with heart disease.
- **Carbon Dioxide (CO₂)** - The U.S. Environmental Protection Agency (EPA) now views carbon dioxide as a pollution concern. Carbon dioxide does not directly impair human health, but it is a “greenhouse gas” that traps the earth’s heat and contributes to the potential for global warming.

These pollutants can linger in the environment and lead to long-term health impairment as well as environmental damage.

Idling Facts

- ❖ Each day Americans waste approximately 3.8 million gallons of gasoline by voluntarily idling their cars. For every gallon of gasoline used, a vehicle emits, on average, 20 lbs. CO₂. That translates to **13 million tons of CO₂ produced annually from voluntary idling!** (“Anti-Idling Primer; Every Second Counts” by Hal Hinkle, Patricia Deacon & “Kasia Duda Hinkle Charitable Foundation
- ❖ Diesel engines emit 15% more CO₂ per gallon than gasoline engines. (“Emission Facts: Average Carbon Dioxide Emissions Resulting from Gasoline and Diesel Fuel” U.S. EPA)
- ❖ **Idling gets zero miles/gallon!**
- ❖ Studies have shown that idling for over **10 seconds** (15 seconds for diesel) uses more gasoline and produces more CO₂ emissions than restarting your engine.
- ❖ Idling is not an effective way to warm up today's engines even in cold weather. The best way to warm up your engine is to drive your vehicle. In fact, your vehicle will warm up faster if you drive it rather than idle it . . . and you'll get better gas mileage.
- ❖ Excessive idling can damage your engine's components, including cylinders, spark plugs and the exhaust system. (Natural Resources Canada, Office of Energy Efficiency)

Goal: Reduce Voluntary Idling

Voluntary Idling: Idling when a vehicle is not being driven.

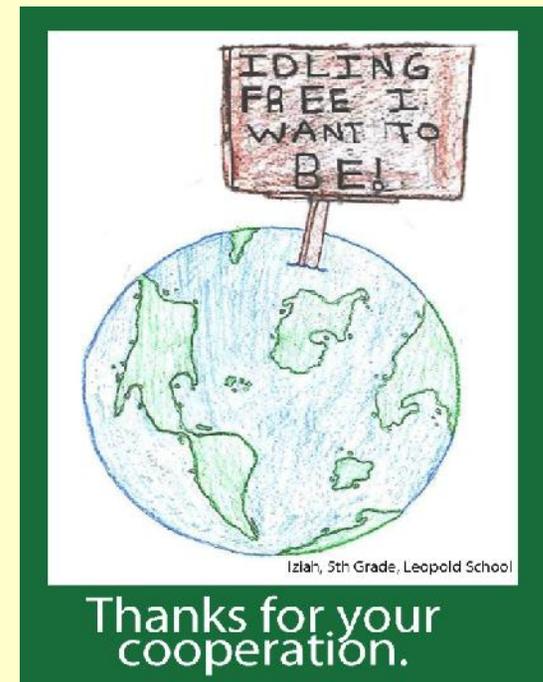
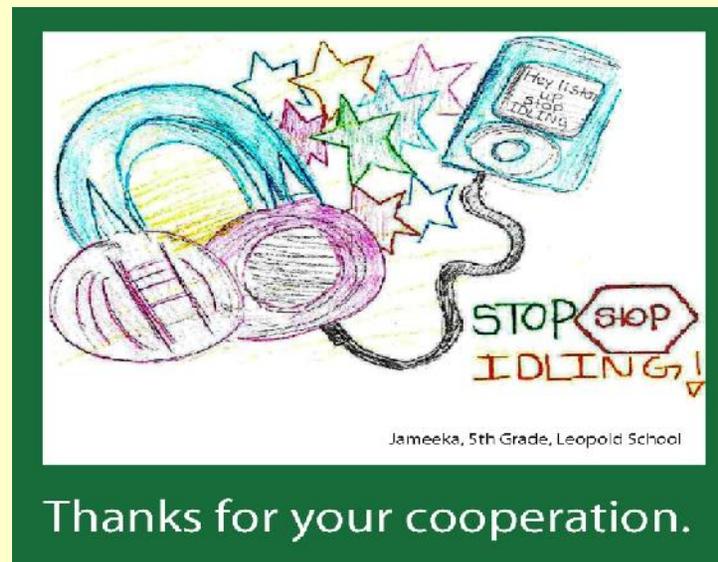
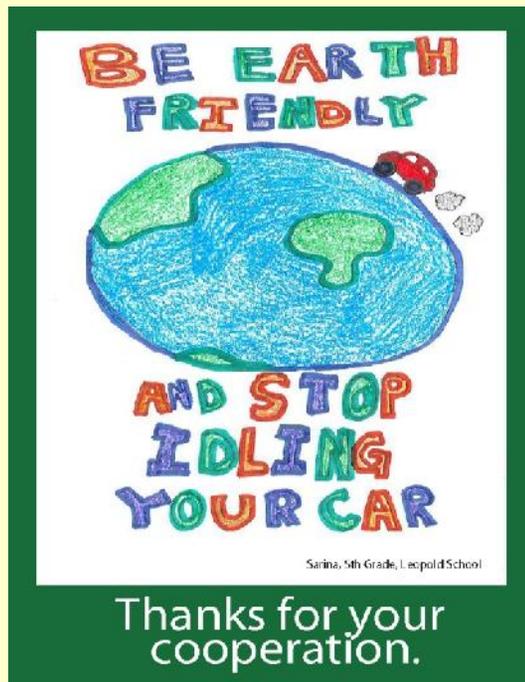
Examples:

- Drive-thru lanes
- Dropping off and picking up customers
- Delivering/picking up packages
- Car washes
- Warming up the car

Municipal Idling Reduction Sign



Community Idling Reduction Posters



Idling Reduction Cling

**STOP YOUR
ENGINE!**

WHEN IDLING OVER
10 SECONDS

It all adds up to cleaner air
cleanairwisconsin.org

Why Participate?

- ✓ Reduce fuel costs
- ✓ Better gas mileage
- ✓ Don't want to be wasteful
- ✓ Minimize environmental impact
- ✓ Concerns about air quality
- ✓ Concerns about climate change