

## Web site Resources

**Clean Diesel at Mid America Regional Council**

[www.marc.org/Environment/airQ/cleandiesel.asp](http://www.marc.org/Environment/airQ/cleandiesel.asp)

**Idling Reduction Rule for JO and WY Counties**

[www.kdheks.gov/bar/posthearing.html](http://www.kdheks.gov/bar/posthearing.html)

**Idling Rule in the Kansas Registry**

[www.kssos.org/Pubs/register/2010/Vol\\_29\\_No\\_23\\_June\\_10\\_2010\\_p\\_857-976.pdf](http://www.kssos.org/Pubs/register/2010/Vol_29_No_23_June_10_2010_p_857-976.pdf)

**Johnson County Environmental Department**

[www.sharetheair.org/](http://www.sharetheair.org/)

**Kansas Clean Diesel Program Grants**

[www.kdheks.gov/bar/air-monitor/dieselgrant.html](http://www.kdheks.gov/bar/air-monitor/dieselgrant.html)

**Kansas Small Business Environmental Assistance Program**

[www.sbeap.org](http://www.sbeap.org)

**KC IDLE FREE**

[www.sustainablekylineskc.org/about.asp](http://www.sustainablekylineskc.org/about.asp)

**KDHE, Bureau of Air**

[www.kdheks.gov/bar/index.html](http://www.kdheks.gov/bar/index.html)

**National Clean Diesel Campaign**

[www.epa.gov/diesel/](http://www.epa.gov/diesel/)

**Unified Government Wyandotte County, Kansas City KS**

[www.wycokck.org/dept.aspx?id=5108&menu\\_id=942&banner=15284](http://www.wycokck.org/dept.aspx?id=5108&menu_id=942&banner=15284)

## Air Pollution Glossary

**Attainment:** Designated area is within EPA established limits for criteria pollutant(s).

**Criteria Pollutants:** A group of very common air pollutants regulated by EPA on the basis of health and/or environmental effects.

**Non-attainment:** Designated area exceeds EPA established limits for one or more criteria pollutants. The designated area can be in attainment for some pollutants but non-attainment for others at the same time.

**Off-road mobile sources:** Construction equipment, aircraft, trains, etc., are considered "off-road mobile sources."

**On-road mobile sources:** Cars, busses, heavy-duty trucks, and motorcycles are defined as "on-road mobile sources," since they move on roads.

**Opacity:** The obscuring power of an emission expressed in percent. Example: An exhaust stack at a fictional "Zorch" plant emits white smoke. When you look through the smoke at the background, you can see 80% of the background. Therefore, the opacity of the smoke is 20%.

**Stationary sources:** Industrial/commercial sources are defined by the Clean Air Act as "stationary sources." Buildings don't move, hence the classification as "stationary."

**Volatile Organic Compounds (VOC):** Any organic compound which participates in atmospheric photochemical reactions. Types of VOCs: solvents, oil-based paint, gasoline, alcohol, and petroleum-based inks.

*How ground-level ozone is formed: VOCs + Sunlight + Heat = ground-level ozone.*

## List of Acronyms

**APU** = Auxiliary Power Unit

**ARRA** = American Recovery and Reinvestment Act

**BOA** = Bureau of Air (at Kansas Dept. of Health and Environment)

**CARB** = California Air Resources Board

**CO** = Carbon Monoxide

**CO<sub>2</sub>** = Carbon Dioxide

**DERA** = Diesel Emissions Reduction Act

**DOC** = Diesel Oxidation Catalyst

**DPF** = Diesel Particulate Filter

**EPA** = Environmental Protection Agency

**HAP** = Hazardous Air Pollutant

**KDHE** = Kansas Department of Health and Environment

**NO<sub>x</sub>** = Nitrogen Oxides

**PM (PM<sub>2.5</sub> or PM<sub>10</sub>)** = particulate matter (less than 2.5 microns or 10 microns in size)

**PPB** = parts per billion

**PPI** = Pollution Prevention Institute (at K-State)

**PPM** = parts per million

**SBEAP** = Small Business Environmental Assistance Program

**VOC** = Volatile Organic Compound

## EPA Criteria Pollutants

The United States Environmental Protection Agency (EPA) has established standards for the six most common and pervasive air pollutants in the country. The pollutant, its sources, and health effects are listed below:

POLLUTANT	SOURCES	HEALTH EFFECTS
Carbon monoxide	Combustion processes, such as cars & industry. Burning of organic material.	Replaces oxygen in the bloodstream; aggravates heart disease; impairs alertness.
Lead	Smelters, battery plants & refineries; exhaust of vehicles that use leaded gasoline; lead-based paint and pottery.	Increases risk of harm to central nervous system, especially in children.
Nitrogen Oxides	Combustion processes such as cars & power plants.	Impairs breathing, increases lung infections & worsens existing lung disease.
Ground-level ozone*  *This is ozone found in the troposphere, where we breathe. High concentrations of naturally-occurring ozone are found in the upper atmosphere and shield us from harmful radiation. The "ozone hole" is a thin place in the layer, and it's widely believed that some man-made chemicals, most commonly those used for refrigeration, make the ozone hole larger than it is naturally.	Formed when heat & sun-light mix with pollutants, called VOCs, from industry (solvents, paints, inks), vehicle & household products (gasoline, paints, cleaners).	Irritates eyes, nose, throat; increases asthma attacks, & impairs athletic performance.
Particulate matter (PM-2.5) - 2.5 microns or smaller.	Dust, pollen, soot, & other small particles in the air. Most commonly a product of combustion from power plants and diesel engines.	Irritates lungs' pathways which can increase respiratory infection & asthma attacks & worsen disease.
Sulfur dioxide	Oil-and coal-burning power plants; some industrial processes.	Increases respiratory infections and asthma attacks; worsens chronic lung disease.