No Idling Zone

In a Nutshell

Idling is the term given to running an engine that powers a vehicle when the vehicle is not moving. No Idling Zones and anti-idling policies promote turning off vehicles that are not moving. Even though they are not moving, idling vehicles still create exhaust, which contributes to the formation of ozone smog and harmful particulate matter and can negatively affect lung growth and development in children. Also, idling vehicles waste fuel and increase unneccessary wear and tear on the vehicle's engine.

The "How To"

Idling Summary Information

Even though idling vehicles are not moving, they are still creating exhaust. Nitrogen oxides and volatile organic compounds are found in exhaust and are known to contribute to the formation of ozone smog and harmful particulate matter. Idling vehicles are contributing to the depletion of the ozone layer without going anywhere.

An idling vehicle consumes only enough power to keep the engine running and to operate the accessories present within the vehicle. An idling vehicle still needs fuel to operate and therefore wastes the fuel because the vehicle is not moving, but the engine is still running. Also, the unneccessary operation of the engine increases wear and tear on the engine components. The frequency of maintenance, lubrication, and parts replacement are all increased because of idling.

Implementation of a No Idling Zone or anti-idling policy is not difficult. One large factor to the success of an anti-idling policy is spreading the word regarding the policy. Signs, flyers, mailers, newsletters, and online articles all help in educating parents, bus drivers, and truck drivers about the policy.



Schools

No Idling Zones are most common near schools. As the <u>Earth Day Network</u> illustrates, children are more vulnerable to the impacts of vehicle pollution than other populations for three reasons. First, their lungs are still in the development phase. Second, children breathe up to 50 percent more air per pound of body weight than

adults. Lastly, since children are shorter than adults, they are closer to the tailpipes from which exhaust is emitted.

The Earth Day Network and the Clean Air Campaign offer an implementation toolkit designed for schools who wish to implement anti-idling policies. The toolkit offers three steps to implementing a policy, which are listed below.

- 1. Awareness Introduce the campaign; identify teachers, administrators, parents who will become your school's No Idling Champions
- 2. Implementation Notify parents; post no idling signs; publish no idling campaign information on the school website and in newsletters
- 3. Data Collection Determine a timeline for counting idling and non-idling cars in the carpool line; reward drivers who do not idle

Local Governments

Cities and counties throughout the St. Louis region, and the United States in general, are implementing No Idling Zones and anti-idling policies with increasing frequency. Adoption of an ordinance or resolution are the methods by which municipalities can implement an anti-idling policy. Example ordinances from the City of St. Louis, St. Louis County, and elsewhere can be found in the Planning & Zoning tab.

Planning & Zoning

Resources for School Districts

Naperville, Illinois, Community Unit School District 203 has a clear anti-idling policy that directs bus drivers to turn off their buses. The policy does state, however, that the safety of the children trumps air quality considerations.

The Environmental Protection Agency offers a sample school bus idling policy for use by school districts.

State Idling Legislation

States have created laws restricting the time vehicles, usually diesel, are allowed to idle. Missouri Department of Natural Resources has implemented regulations to control heavy-duty diesel vehicle idling in Missouri (Regulations, 10 CSR 10-2.385 and 10-5.385). According to the Environmental Law Institute, both Illinois and Missouri have state laws restricting idling practices.

In certain counties and townships in Illinois, diesel vehicles that weigh 8,000 pounds or more are not allowed to idle for 10 minutes in any 60-minute period. There are exceptions, however, including a 15 minute limit for the comfort of the passengers, and idling when the outdoor temperature is less than 32 degrees or greater than 80 degrees Fahrenheit.

In select counties in the Kansas City and St. Louis metropolitan areas in Missouri, heavy-duty diesel vehicles are not allowed to idle for more than 5 minutes in any 60-minute period. Exemptions include a 15 minute limit to maintain the comfort of passengers.

Through the Illinois Clean School Bus Program of 2003, the Illinois Environmental Protection Agency vowed

to work with engine manufacturers, school districts, and commercial school bus providers to determine conditions when idling is not necessary.

In Illinois, Public Act 094-0845 was signed into law in 2006 and discusses idling restrictions in the Metro-East and Chigoland areas.

Municipal Idling Ordinance Examples and Samples

Within the City of St. Louis, the <u>St. Louis City Ordinance 68137</u> regulates and controls motor vehicle idling. The ordinance lists six exemptions and also states that drivers who violate the ordinance can be punished by a fine of up to \$100.

Section 612.340 of the <u>Revised Ordinances of St. Louis County</u> prohibits anyone from allowing their vehicle to idle for more than three consecutive minutes unless the engine is being used to operate a loading, unloading, or processing device.

Within the Municipal Code of Chicago, <u>Section 9-80-095</u> addresses diesel powered vehicles and the idling restrictions placed on them. According to the ordinance, it is unlawful for any person to let a diesel-powered vehicle idle for more than three minutes during any 60-minute time period. There are nine exemptions listed, and the fine for violating the ordinance is \$250.

Dollars & Cents

Costs of Idling

Anti-idling policies are easy, cost-effective ways to reduce air pollution. Reducing idling will conserve fuel, save money, and improve regional and local air quality. According to the Center for Energy and Environmental Policy at the University of Delaware, an estimated \$1 billion is spent each year on idling-related engine repairs.

Potential Cost Savings for School Districts

According to the Environmental Protection Agency, a fleet of 20 school buses that can reduce idling by 30 minutes each day for each bus will save about \$3,600 per year and 900 gallons of fuel per year. Even a fleet as small as 5 buses can see savings of \$450 per year if the idling time is reduced by 15 minutes per day.

Potential Cost Savings for Residents and Governments

According to the Hamilton County Department of Environmental Services in Ohio, drivers who let their car idle for ten minutes use approximately 0.026 gallons of gasoline, which costs about 5 cents. If you let your car idle, on average, for only ten minutes per day, the money wasted adds up to almost \$20 per year. This may not seem like a lot, but it is comparable to throwing a \$20 bill straight into the garbage. If you let your car idle for longer than 10 minutes each day, this total will, of course, be higher.

Measuring Success

Successful No Idling Zones at Schools

One way to measure the success of an anti-idling policy in place at schools is to count the number of vehicles or school buses that idle while dropping off or picking up students. Students or administrators can count how many cars and buses are idling before the policy is enacted and count again after the policy is implemented. The numbers should be dramatically different, since one of the main objectives of an anti-idling policy is to inform drivers of the wasteful and harmful practice.

Discover More

Idle Reduction Strategies

The Alternative Fuels Data Center of the U.S. Department of Energy offers information and resources about <u>idle reduction strategies</u>. Maps, data, case studies, and a map of truckstop electrification facilities are all offered on the website.

News Stories about Anti-Idling Policies

Fourth grade students in the Rockwood School District recently received the Environmental Protection Agency Region 7's 2012 President's Environmental Youth Award for their work on establishing an anti-idling policy in the district.

Marie Schaefer Elementary School and Belleville East High School, both in the Metro-East, were honored for their anti-idling policies and practices.

There are many states home to school districts that have implemented No Idling Zones including Alabama, Georgia, Iowa, Utah, and New Jersey.

Penalties for Excessive Idling

In 2012, Durham School Services, a school bus company who provides transportation in 30 states, was issued a \$90,000 penalty for excessive idling in Connecticut, Massachusetts, and Rhode Island. Some buses included in the observation were idling for periods of up to two hours before departing from the bus depot.

In October 2013, North Reading Transportation, a school bus company that operates in several communities in Massachusetts, was issued a \$33,000 fine for excessive idling practices observed by the US Environmental Protection Agency.

Also in Massachusetts, an East Boston waste company, Capitol Waste Services, Inc., paid a fine of \$107,300 for excessive idling in 2008.

In 2009, the large student transportation company First Student, Inc. was assessed a \$128,000 fine for excessive idling observed in Connecticut and Rhode Island. Some school buses were seen idling for two-and-a-half hours before leaving the bus yard to pick up students.

Case Studies

Clean Air Counts Idling Reduction Program

Contact

Clean Air Counts 312-201-4506 epytel@mayorscaucus.org

Address

177 N. State Street - Suite #500 - Chicago, IL 60601

Description

Example Policies

CSR 10-5.385 Control of Heavy Duty Diesel Vehicle Idling Emissions

Contact

Wendy Vit Air Quality Planning Section Chief, Air Pollution Control Program 573-526-3167 wendy.vit@dnr.mo.gov

Address

P.O. Box 176 - Jefferson City, MO 65102

Description

The purpose of the program is to limit idling of heavy-duty diesel vehicles in the St. Louis nonattainment area in order to reduce emissions associated with regional ozone and PM2.5 issues, as well as reduce exposure to localized air toxics emissions. The rule requires all commercial, public, and institutional diesel vehicles in the affected counties to limit idling to 30 minutes while waiting to load or unload at a location. In addition, passenger load and unload locations are prohibited from causing or allowing vehicles to idle for more than 5 minutes in any 60-minute period. Vehicles are also limited from idling for more than 5 minutes when not waiting to load or unload in any 60-minute period, unless the vehicle meets one of the exemptions.

Enforcement is handled through MDNR's Air Pollution Control Program and local air agencies charged with enforcing all department regulations. Enforcement tends to be complaint driven. From MDNR Air Program's perspective, we've received a couple of complaints, which were ultimately resolved through discussions with the company doing the idling (e.g., city buses). We're not aware of any formal enforcement actions taken in

regards to the state regulation; however, as noted above, we may learn more about enforcement activities from our regional office staff which we'll pass along.

Cost

To date, the program has had minimal implementation costs. We rely on existing staff for enforcement and outreach/education efforts, so there are no additional costs associated with staffing. There has been some cost associated with printing brochures and signs for outreach/educational efforts. It was several years back, and it would take a little digging to determine the specifics. If you need more detail, please let me know and I'll have our budget group track that information down.

Lessons Learned

Enforcement is the biggest issue. Idling events tend to be intermittent issues, which can make it difficult for inspectors to actually document violations of these rule requirements. It's difficult to strike a balance of logistical responsibility between truck drivers and facility owners. In other words, who's responsible? Is it the location/facility where freight is being loaded/unloaded or is it the truck driver doing the idling? The lack of clear guidance on how to comply/enforce also results in Title V operating permit issues – how do permit writers incorporate vague requirements? How do permit holders show compliance with regulations?

St. Louis County Air Pollution Control Code Chapter 612 Section .340 Air Pollution Nuisances Prohibited 92)

Contact

Kathrina Donegan MBA, Supervisor, Air Pollution Control Program 314-615-8936 kdonegan@stlouisco.com

Address

41 South Central - Clayton, MO 63105

Description

St. Louis County does not have an idling Program per say, like the State we work on a complaint basis. Our idling rule is under the *St. Louis County Air Pollution Control Code Chapter 612 Section .340 Air Pollution Nuisances Prohibited 92*). The ordinance basically states: "No person shall cause or permit the engine of a motor vehicle, other than an emergency vehicle, to idle for longer than three (3) consecutive minutes while parking, standing or stopped as defined in the St. Louis County Traffic Code, unless the engine is being used to operate a loading, unloading or processing device." The Program responds to about 3 idling concerns a year, most concerns involve school buses or parents idling while picking children up from school. St. Louis County may enforce the State idling rule, should we have the need.

Cost

There is no cost to the program.

Lessons Learned

We have learned that the ordinance is out dated, it was established in 1967 and hard to enforce.