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School Bus Idling Policies

There has been increased concern over the environmental and health related problems associated with diesel fuel emissions. Diesel emissions create serious environmental and health related problems for several reasons. The emissions from diesel-fueled engines can cause serious environmental problems because they emit hazardous compounds such as carbon dioxide, nitrogen oxides, volatile organic compounds and carbon monoxide. These compounds are problematic to the environment because they contribute to global warming and increased levels of ozone. Not only do the compounds contained in diesel emissions have a large, negative environmental impact, but also a negative health impact as well. For instance, compounds such as nitrogen oxides and volatile organic compounds, and nitrogen dioxide can all cause serious lung problems such as difficulty breathing, and a low resistance to infection, asthma, bronchitis, pneumonia, and premature aging of the lungs. Carbon monoxide also has serious health effects by lowering the amount of oxygen carried by the blood, and can cause nausea, dizziness, headaches, and even death (VT Air Pollution Control Division 2003).

Research has also shown that children are the most vulnerable and susceptible to the air pollution caused by diesel-fueled engines because their lungs are still developing (U.S. Environmental Protection Agency 2005). Children also experience incredibly high rates of exposure to diesel fueled engines due to the fact the over 99% of school buses use diesel fuel, with twenty-four million children in the United States spending 3 billion hours a year on 600,000 school buses (VT Air Pollution Control Division 2003). In response to this, numerous state agencies, local governments, and school districts have begun to adopt anti-bus idling policies.

In addition to air pollution, the Environmental Protection Agency has also cited bus idling as contributing to the “wear and tear” of the bus engines and also a waste of fuel and money. The EPA states that the typical school bus engine burns about half a gallon of fuel per hour of idling, which contributes to high amounts of money being spent on fuel. Bus idling can also create engine damage by creating a carbon buildup and/or causing the engine to slobber, as well as creating oil damage (EPA 2005).

Bus Idling Throughout the United States

Different states have begun to take different measures with regards to the idling of school buses. At times, the legislation has been directed specifically at school buses. However, the general trend seems to be legislation that deals with the idling of trucks in general. Some of these pieces of legislation often have specific requirements for school buses, but that is not always the case. Also, most of the legislation that has been created is coupled with various exemptions. In some cases, these exemptions are common sense and I will not mention them. For example, the regulations in most of these states do not apply when in heavy traffic. Below, is a discussion of a few different states and the legislation that they have passed that deals with school bus idling. For further details on this information see this website:

<http://www.arb.ca.gov/regact/sbidling/appb.pdf> (*California Environmental Protection Agency: Air Resources Board*).

Connecticut

In the state of Connecticut, there is a three-minute limitation on the idling of any “mobil source” engine. School bus drivers, however, are required to shut off their buses immediately unless they expect to be leaving within three minutes. Also, the school buses are allowed to idle in the morning in order to bring the engine up to an operating temperature or to defrost the windows. There are also various exemptions. The school buses are permitted to idle if it is necessary to operate safety equipment, maintain a safe temperature for children with special needs, or if the outside temperature is below 20 degrees Fahrenheit.

Nevada

The regulations in Nevada are much less strict than those in many other states. In Nevada, diesel trucks and school buses are limited to fifteen minutes of idling.

New Hampshire

In New Hampshire, both diesel and gasoline vehicles have idling restrictions based on the outside temperature. When the temperature is above 32 degrees Fahrenheit, there is a five-minute idling restriction. Between -10 degrees Fahrenheit and 32 degrees Fahrenheit the restriction changes to fifteen minutes. Finally, when the temperature is below -10 degrees Fahrenheit there is no idling restriction on any vehicles. These restrictions do not apply to Emergency vehicles.

New York

The current regulations in New York limit the idling of diesel buses and trucks to five minutes. However, if a vehicle has been motionless for more than two hours in temperatures below 25 degrees Fahrenheit, idling is permitted.

Virginia

In Virginia, there is a ten-minute restriction on the idling of buses when unattended, parked, or stopped. Interestingly, school buses are exempt from this regulation.

Idling Regulations in the Areas Surrounding Schools

Aside from the general regulations discussed in the last section, there are also various states and/or counties that have additional regulations that deal specifically with schools or areas around schools. Below is some information regarding such policies:

- **California:** School buses, school pupil activity buses, youth buses and general public paratransit vehicles must:
 - 1.) turn off the bus or vehicle engine upon stopping at a school or within 100 feet of a school, and not restart the bus or vehicle more than 30 seconds before departing from the school or from within 100 feet of a school; and
 - 2.) not cause or allow a bus or vehicle to idle at any location greater than 100 feet from a school for:
 - a. more than five consecutive minutes; or
 - b. a period or periods aggregating more than five minutes in any one hour (California Environmental Protection Agency: Air Resources Board 2003).
- **Pennsylvania:** Allegheny County Health Department created the following rules about bus idling at schools.
 - 1.) No school bus driver shall cause or allow the engine of any school bus subject to this section to idle prior to, during layover between, at the destination of, or at the conclusion of, any trip or route for more than five (5) consecutive minutes, except under the conditions described in Subsection c, below.
 - 2.) No school bus driver shall cause or allow the engine of a school bus subject to this section to be accelerated while idling, unless such action is taken in order to operate other equipment.
 - 3.) A school bus driver shall not park or idle a bus within 100 feet from a known and active school air intake system, unless the school district has determined that alternative locations block traffic, impair student safety or are not cost effective (Allegheny County Health Department 2004).

Bus Idling Policies in Vermont Schools

There is no state policy regarding bus idling in Vermont. Some school districts, however, have either created bus idling policies themselves or included guidelines in their contracts with the bus companies. Other schools have made agreements with their bus drivers, though they currently have nothing in writing.

The policies concerning bus idling generally outline when a bus may idle, as well as the amount of time they may do so. The policy may include service delivery trucks as well as buses. Other issues that may be discussed are the location of ventilation ducts with regards to the pickup/drop-off zone and the idling of the parents' vehicles. In order to keep the safety of the children in mind, the EPA recommends making exceptions on the idling policy for extreme weather, as well as idling in traffic. The South Burlington School District has a good example of a bus idling policy outlining the amount of time a bus may idle in different weather conditions. Below -10 degrees Fahrenheit there is no idling limit. Between -10 and 32 degrees Fahrenheit there is a 10-minute limit, and the limit for any temperature over 32 degrees is a 4-minutes.

One complication stated by the Chittenden South Supervisory Union School District was that the warning lights the older buses use when the buses are loading and unloading require the engine to be running or the battery will die, a problem especially in cold weather. Newer buses are generally equipped with a strobe light system that does not suffer this flaw.

To find out the bus idling policies of school districts in Vermont, we contacted every district in Vermont via email and heard back from 11 of the districts. The following table includes the school districts we were able to contact regarding their bus idling policies. They are broken up into three categories. The first category is for school districts with a policy regarding bus idling. This includes districts that have a policy in the contract with their bus company, along with the districts that wrote their own policy. The second category is for districts that have in no way dealt with the issue. Lastly, a third category was made for school districts that do not have an official policy of any kind, but that have addressed the issue informally.

VT School District Idling Policies

<u>Policy</u>	<u>No Policy</u>	<u>Informal Agreement</u>
South Burlington School District	Colchester School District	Burlington School District
Washington South Supervisory Union (Northfield)	Franklin Central Supervisory Union	Chittenden South Supervisory Union
Washington Central Supervisory Union (Barre)	St. Johnsbury School District	Rutland South Supervisory Union (North Clarendon)
Montpelier		Essex North Supervisory Union

References

“Fact Sheet: Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools.” *California Environmental Protection Agency: Air Resources Board*. August 2003. <http://www.arb.ca.gov/toxics/sbidling/mtrcar.pdf>. Viewed 04/07/05.

“School Bus Idling Regulation.” *Allegheny County Health Department*. October 2004. <http://www.achd.net/airqual/pubs/pdf/sbireg.pdf>. Viewed 04/07/05.

“Summary of Anti-Idling Regulations in Other States.” *California Environmental Protection Agency: Air Resources Board*. <http://www.arb.ca.gov/regact/sbidling/appb.pdf>. Viewed 04/19/05.

U.S. Environmental Protection Agency. Clean School Bus USA: Anti-Idling. April 2005. <http://www.epa.gov/otaq/schoolbus/antiidling.htm>. Viewed 4/12/05.

VT DEC Air Pollution Control Division. School Bus and Diesel Exhaust. 2003. <http://www.anr.state.vt.us/air/MobileSources/htm/Diesel.htm>. Viewed 4/12/05.

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