

## Air Pollution Control Program

### 2013 Missouri Clean Diesel Program

In 2013, the Missouri Department of Natural Resources' Air Pollution Control Program received a grant from the U.S. Environmental Protection Agency, or EPA, to fund a clean diesel program in Missouri. The Air Program solicited early school bus replacement projects for school districts located within the state. Five school districts were selected for funding under the 2013 Missouri State Clean Diesel Program and each implemented an early school bus replacement project.

The estimated projected annual and lifetime emission reductions from the five school bus replacement projects implemented under the 2013 program are available in the table below. The projected emission reductions were calculated using the [EPA Diesel Emissions Quantifier](#).

<b>2013 Missouri State DERA Project Emission Results and Health Benefits</b>				
	<b>NOx</b>	<b>PM</b>	<b>HC</b>	<b>CO</b>
<b>Annual Reductions (tons/year)</b>	<b>0.29</b>	<b>0.02</b>	<b>0.03</b>	<b>0.11</b>
<b>Lifetime Reductions (tons)</b>	<b>3.47</b>	<b>0.19</b>	<b>0.33</b>	<b>1.35</b>

The program is committed to reducing diesel emissions in Missouri. Diesel emissions contain oxides of nitrogen as well as volatile organic compounds, which in the presence of sunlight react to form ground-level ozone, the pollutant of most concern statewide in Missouri. Ozone is known to cause and aggravate respiratory diseases such as asthma. Missouri currently has several areas in the state violating or close to violating EPA's National Ambient Air Quality Standard for ozone, which is set to establish limits on ground level ozone concentrations that will protect public health.

Diesel emissions also contain fine particulate matter, which can penetrate deep into people's lungs past their natural defenses. This can lead to a variety of different lung and respiratory disease including lung cancer. Reducing diesel emissions, particularly in high population areas and areas that receive disproportionately high concentrations of air pollutants is vital to the program's mission of protecting public health.

Each school district received approximately \$20,000 to implement an early school bus replacement project. The five school districts that implemented early school bus replacement projects through the 2013 Missouri State Clean Diesel Program are listed below:

- Clever R-V School District
- Hannibal Public Schools
- Joplin Schools
- Ozark R-6 School District
- West County R-IV School District

