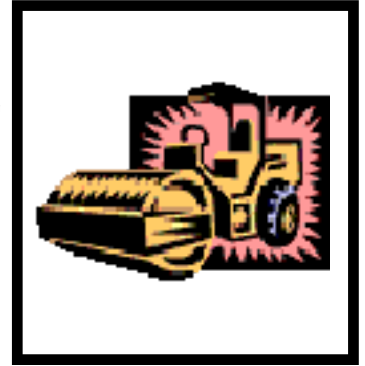




SUSTAINABLE ENVIRONMENT for QUALITY of LIFE



DIESEL FLEET EMISSION REDUCTION PROGRAM

What is it?

A diesel fleet emission reduction program is one or more actions that produce measurable reductions in NOx and other air pollutants. These actions may include retrofitting existing equipment with catalysts, filters, or traps; replacing the oldest vehicles in the fleet (which generally are not cost-effective to retrofit) and using Ultra-Low Sulfur Diesel (ULSD) as soon as possible. Any governmental unit, business, or agency that has either ON-ROAD or OFF-ROAD diesel fleets can participate in such a program.

Costs

Costs vary widely depending on the type of measure used. Ultra-Low Sulfur Diesel (ULSD) is now standard and costs are part of the regular operating costs of diesel equipment. Measures such as Diesel Oxidation Catalysts (DOCs) have very moderate costs, while particulate traps are somewhat more expensive. However, grants are widely available to help with the costs of retrofit technology, and loans may be available to help with private-sector fleets. Other measures, discussed under Basic Information, have minimal cost.

Shared Impact and Benefits

Retrofit technologies will reduce emissions from trucks, buses and construction equipment that are currently in use. These emissions benefits can be used in at least two ways:

- If in place in a timely manner, they may be factored into the "Local Planning Assumptions" used to develop the regional modeling for emissions testing, thus lowering the emissions in the model output.
- They can be credited in the State Implementation Plan (SIP) either as an enforceable control strategy where the state or responsible unit of government administers the retrofit program, or under the Voluntary Measures Program.

The total amount of the reduction will be based on the particular actions, or combination of actions (for example, catalyst and ULSD), implemented.

Cleaner air for users of diesel equipment means that they don't inhale immediate pollutants from tailpipe emissions, or from the area. This means that truckers, construction workers, lawn maintenance employees, and school-bus riders have a reduced risk for asthma or other respiratory conditions.

And reduced emissions are in general better for public health, as well as for enabling the region to meet Federal air quality standards (which are also based on public health needs).

Tracking Progress

Let Centralina Council of Governments know when you've implemented this action by contacting Carol Lewis at 704-348-2730 or clewis@Centralina.org.



This Action Item can be implemented as a

- POLICY
- ORDINANCE
- PROGRAM

The Bottom Line

Diesel fuels are a major source of oxides of nitrogen, fine particles, and air toxics. Cleaning up diesel emissions can have a major positive impact on air pollution and public health.

Interested? Read on!



Action Steps

- Work with the fleet owners/operators, to characterize the fleets that are candidates for retrofit projects.
- Understand which retrofit technologies are good choices for your fleets.
- Use EPA's Retrofit Calculator to calculate the benefits of each project. This tool allows you to investigate many different scenarios for your projects.
- Understand the in-use testing requirements associated with the retrofit program.
- Remember that school buses produce pollution that has health implications for everyone, especially children. Several programs exist that address pollution from school buses, including the "Adopt A School Bus" (with private partners) and the Clean School Bus grants.
- Consider replacement of older, polluting vehicles with vehicles equipped with emission-control technologies.

For More Information

- North Carolina's Mobile Source Emission Reduction Grants, available through the NC Department of Environment and Natural Resources, Division of Air Quality, is a great source of funding and guidance. Contact Heather Hildebrant at www.ncair.org/contact/ under Emissions Reduction Grants.
- South Carolina's Department of Health and Environmental Control (SC DHEC) has information on emissions and programs for idle reduction. Contact <http://www.scdhec.gov/environment/baq/b2.aspx> for information on their B2, Breathe Better, anti-idling campaign for school buses.
- A number of counties in the SEQL region have participated in school bus retrofit programs through various grants. For more information, contact the local Fleet Manager for your School System to learn more about your school district's program or for information on how it's working.
- US EPA has a number of programs, including grant programs, that address diesel emissions reductions. Check out www.epa.gov/cleandiesel/ for additional information and links to other programs. This website also has links to EPA-approved technologies, so you know that the particular product meets national standards and that the promised emissions reductions have been verified.
- US EPA's Smartway Program addresses diesel emissions reductions in the trucking and distribution industry. More info: www.epa.gov/smartway/
- EPA's Clean School Bus USA program is a similar program targeted at cleaning up school bus fleets. More info: www.epa.gov/cleanschoolbus/

Basic Information

- Diesel fuels are a major source of oxides of nitrogen, fine particles, and air toxics. Emissions impact those who work around them in the trucking and freight distribution industries (where trucks and locomotives idle), in the construction industry (where most heavy equipment is diesel-powered), and even children who ride diesel school buses. Emissions also add to the problem of ground-level ozone and haze.
- The term "Diesel Emission Reduction Programs" covers a whole range of technologies, from DOCs, to traps and filters, to closed-crankcase systems, to the use of auxiliary power units for locomotives and refrigerated trailers, to shore power at truck stops. It also includes idle-reduction programs (such as in school zones and bus parking lots). It may also include both "carrots" and "sticks," or a combination of the two. For example, a community may incentivize private construction fleets to retrofit off-road equipment by awarding extra "points" in bids for construction projects, or the same community could require that contractors use retrofitted fleets as a condition of the bid award.
- Many programs are low- or no-cost, and in fact save money, such as idle-reduction programs, because idling vehicles are burning expensive fuel.



How long does this take to implement?

Installing most retrofits is a simple process; school bus fleets frequently retrofit a considerable part of the fleet over the summer or winter break. Programs such as Truck Stop Electrification take considerably longer. A major factor in these programs is timing and availability of grant funds, which can take a while to come through.

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