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.

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).

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.

This Action Item can be implemented as a
- POLICY
- ORDINANCE
- PROGRAM

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.

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!
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.