

## **Preparing to Store B20 Biodiesel in Above or Below-Ground Storage Tanks**

Biodiesel, being made up of methyl esters meeting ASTM D6751, has a tendency to have a cleaning action and dissolve the accumulated sediments in diesel storage and engine fuel tanks. These dissolved sediments can plug fuel filters and in some cases cause damage to the fuel injection system. If you plan at any time to use or store biodiesel for the first time you should clean the above or below ground storage tanks.

The level of the “cleaning action” depends on the amount of sediment in the system. If the system is sediment free there should be no effect. The level of “cleaning” will also depend on the blend level of biodiesel being used. The cleaning effect is much greater with biodiesel blends above 35% biodiesel as compared to B20 (20% biodiesel) and lower blends. The cleaning effect of the biodiesel in B20 is sufficiently diluted so that most problems encountered are insignificant, but an occasional plugged fuel filter may occur upon initial use. Keep some extra filters on hand and monitor potential filter clogging a little closer than normal when first starting with B20.

Since it is in our collective interests to try to avoid any filter clogging issues and interruption in our school bus fleets it has been decided by the Alabama State Department of Education – Pupil Transportation Division that all existing school bus fleet diesel storage tanks will be thoroughly cleaned before introducing B20 biodiesel for use in school buses. This is an extra safeguard that should help contribute to a smooth changeover to B20 biodiesel.

**What is a “thorough” cleaning?** The important thing is that all contaminants are removed from the storage tank(s). The tank should be cleaned either by entering the tank (usually most costly) or the use of an impingement cleaning system with high pressure to clean/spray the interior and remove all contaminants. Before and after pictures should be required from your tank cleaning vendor to be sure all areas...bottom, sides and top have been adequately cleaned.

Information regarding the limited availability of the ADECA grant for the cleaning of school bus fleet tanks may be found on this site or at

<http://www.adeca.alabama.gov/Energy/Document%20Library/Biofuels%20for%20Schools%20Grant%20Package.pdf>

**Be sure to follow the instructions in the grant package and fill in all requested information. The signature of your school district superintendent is required for processing of your grant request. Additionally, all grant applications must be reviewed and approved by the Alabama State Department of Education, Pupil Transportation Section.**