



A grant from the U.S. Environmental Protection Agency (EPA) to Farmland Management Services (FMS) has helped reduce diesel emissions across six of the company's Wisconsin cranberry farms.

The grant, awarded under the EPA's National Clean Diesel Funding Assistance Program, has curbed the amount of particulate matter and nitrogen oxides emitted by diesel engines on farms which can cause adverse health effects. There are currently between 9,000 and 11,000 stationary diesel agricultural engines operating throughout central Wisconsin. Older diesel engines are more likely to emit particulate matter and nitrogen oxides.

Particle pollution created by diesel engines contains microscopic solids or liquid droplets that are small enough to infiltrate the lungs and bloodstream. Smaller particles tend to cause more serious health problems. Particles 10 micrometers in diameter or smaller, which are regulated by the EPA, pose the greatest health risks.

Nitrogen oxides are covered under the EPA's National Ambient Air Quality Standards, which were first set in 1971 under the Nixon administration. Even very short-term exposure to nitrogen dioxide, a highly reactive nitrogen oxide that forms quickly from engine emissions, has been shown to cause adverse respiratory effects including airway inflammation in healthy people and increased respiratory symptoms in people with asthma.

The FMS emission reduction projects were just part of a range of projects that benefitted from the \$900,000 EPA grant. Each project reduced dangerous emissions from diesel engines through idle reduction technologies or engine repowers on ferries, long haul trucks, school

buses, and stationary irrigation pumps.

Leonardo Academy, a nonprofit organization that provides consulting and solutions across a wide range of sustainability-related issues, prepared and submitted the grant application to the EPA on behalf of FMS and several other organizations. Upon receipt of the EPA funds, Leonardo Academy acted as the administrator and fiscal agent for the grant funds.

"Leonardo Academy is dedicated to developing sustainability strategies for people, companies and organizations that engage progress in environmental and social equity achievements in driving economic success," said Leonardo Academy President, Michael Arny. "Part of Leonardo Academy's goal in advocating the EPA's National Clean Diesel Campaign is to improve air quality by reducing emissions from all types of diesel-fueled engines throughout Wisconsin. "

FMS manages about 48,800 acres of tree and vine crops in Wisconsin, Washington and California, and has taken an aggressive approach to reducing diesel emissions across its operations.

"We are privileged to receive this award from the EPA," said Steve Hahn, Area Manager for FMS. "FMS is committed to improving the communities and environments in which we operate. This project is one example of the many steps we take to reduce emissions and achieve better fuel efficiency from diesel engines in our operations throughout the country."

FMS has also made efforts to eliminate the burning of orchard residues, estimated at between 40,000 and 100,000 tons per year. Nearly all tree limbs from pruning or tree removal are now pulverized in the field and returned to the soil or used as a dust suppressant on farm roads.

Image credit: [Les Chatfield](#)

<http://www.justmeans.com/EPA-Grant-Reduces-Dangerous-Emissions-from-Diesel-Engines/56173.html>