

Lubricants 'Grease' the Way for Biobased Products Use Among Government Agencies

Among the many categories of biobased products used by government agencies, **Biobased Lubricants** are one of the most widely used groups. This category includes hydraulic fluids, transmission oils, two-cycle engine oils for air and water-cooled engines, bar and chain oils, penetrating oils and new uses such as transformer oils.

All of these products are made entirely or in part from soybean oil produced in abundant supply by American farmers, and thus help reduce U.S. dependence on foreign oil sources. Furthermore, in general, they are less harmful to the environment, and safer to use than their petroleum counterparts.

In the lubricant category, one of the most widely used products is hydraulic fluid, and one of the organizations that have used these products the most are parks within the National Park Service. The experience of Chuck Werner, heavy equipment mechanic, at Olympic National Park, on the Pacific coast in Washington, is typical. "We first started using these products on a trial basis a few years ago as part of U.S. Departments of Energy and Interior Green Energy Parks Program. They worked so well that we now use them in at least a third of our nearly 100 vehicles," he says.

"We have two boom trucks, each of which uses 90 gallons of hydraulic fluid, and it has performed perfectly for two years," according to Werner. "The only thing we see with the biobased product is that sometimes O-rings and other sealed area may leak a little after the switch to these products because they tend to clean the surfaces they are exposed to, but this is easy to work around."

Across the country, Allen Somers, Maintenance Supervisor at Shenandoah National Park in Virginia, uses biobased hydraulic fluid in a couple of aging trash collecting trucks. "These vehicles are all over the park and it's nice to know we're helping keep the park's environment safe," Somers says.



Allen Somers, maintenance supervisor at Shenandoah National Park in Virginia likes the environmental benefits of multiple biobased products, including hydraulic fluid, used in their vehicles and shop.

In addition to hydraulic fluid, Somers reports that Shenandoah is now using biodiesel and biobased fuel additive for their diesel vehicles, as well as biobased penetrating and bar and chain products.

Chris Case, at Pictured Rocks National Lakeshore, is so enthusiastic about biobased lubricants that he actually conducts workshops on how to use them within the National Park Service and in communities in the Midwest.



Dozens of biobased products get high marks in terms of performance, according to Bob Coulson, supervisor of Roads and Ground Unit at the 6,584-acre facility with hundreds of laboratories, greenhouses and office and storage buildings.

Another long-time user of biobased lubricants is the U.S. Department of Agriculture's Beltsville Agricultural Research Center (BARC) in Maryland. BARC's Bob Coulson, Branch Chief of the Roads and Ground Unit, says, "Any moving part of any tool or vehicle that needs lubrication and/or hydraulic fluid to work, we're probably using a biobased product. In fact as of three weeks ago Farm Operations of the BARC is now purchasing biobased products for the entire Branch. This includes all of our forage production equipment such as combines, choppers, thrashers for soybean research, etc. I feel that within 3-6 months we will increase our biobased usage by 200%," he predicts.

Although it is not widely available commercially, BARC is testing biobased engine oil in its vehicles, and "The results so far look promising," Coulson says.



Numerous parks and other government facilities (including state and local governments) particularly like biobased two-cycle engine and bar and chain oils. Olympic National Park Road and Fleet Supervisor Jeff Baillargeon, sums it up well for everyone: "We use chain saws, weed cutters and other two-cycle engine equipment all the time. By their very nature, especially chain saw bar oil, product gets into the environment. With biobased lubricants, you don't have the same kinds of worries about environmental contamination, and the bar chain oil just seems to be more adhesive and sticks to the bar longer."



Olympic National Park Road and Fleet Supervisor Jeff Baillargeon finds environmental and performance benefits with biobased lubricants.

Photo credit: Olympic National Park

For lists of biobased lubricants, go to www.unitedsoybean.org/newuses and go to the Products Guide for Industrial Products.

