

BIOFLEET CASE STUDY #11

Parks Canada Agency – Highway Service Centre Banff National Park, Alberta

BACKGROUND

Existing for over a century, national parks and historic sites protect the unique natural elements of Canada's landscapes and history. To date, 42 national parks and 158 historic sites are protected by law and maintained by Parks Canada.

At the Banff National Park in Alberta, Parks Canada operates a fleet of 30 diesel vehicles that service and maintain the park. The entire fleet has made the switch to biodiesel.



BIODIESEL

The Banff Highway Service Centre (HSC) has used biodiesel for the past two years. The operation started looking at making the switch to biodiesel about four years ago after meeting with US counterparts in Yellowstone National Park who were using biodiesel in their fleet.



Reducing greenhouse gases was the primary reason behind converting the Banff fleet to biodiesel. The federal government gives departments with fleets clear targets for reducing greenhouse gas emissions. Biodiesel accomplishes that reduction and being a renewable fuel just raises its value for Parks Canada.

The Parks Canada fleet of 30 that is using biodiesel includes pick-up trucks, medium and heavy trucks, and heavy and light equipment. The vehicles use a variety of diesel engines from Caterpillar, Cummings, GM and Ford.

With departments like National Defense and Parks Canada, the process for selecting fuel and suppliers is very thorough to ensure the supply is reliable, cost-effective and meets environmental standards.

Because this was the first request of its kind at the federal level, the process was quite time consuming. Standards for quality, pricing etc. had to be developed. Now that biodiesel is listed in the Master National Standing Offer for Fuel, Parks Canada may expand its biodiesel use.

STORING AND USING BIODIESEL

4Refuel works with Canadian Bioenergy to supply Parks Canada with a B5 blend of biodiesel. 4Refuel was selected because it could guarantee supply, reliable delivery and a consistent quality that meets the biodiesel fuel standards.

“We have to be able to guarantee that the fuel we use always meets standards,” says Doug Kerr, Parks Canada, Area Manager. “We can’t risk purchasing a fuel that would adversely affect emergency or fleet vehicles. With a requirement for up to 600,000 liters, the fuel must be pre-blended and delivered to our bulk fuel tanks.”

To further ‘green’ its fleet, Parks Canada is also using ultra-low sulfur diesel fuel. The addition of B5 compliments this fuel by adding lubrication lost when the level of sulfur in the fuel is reduced.



The biodiesel is delivered to the Parks Canada Maintenance Compound located in Banff Alberta. The bulk fueling station also supplies the Town of Banff’s public works fleet as well as fire and ambulance services with fuel.

OPERATIONAL ISSUES

To date, Parks Canada’s pilot has not encountered any technical issues or noticed changes in vehicle performance. Initially, maintenance staff did increase the service interval for filters to avoid any clogging but, with the B5 fuel, it seemed unnecessary. The filters are now changed at the same interval as filters in vehicles using conventional fuel.

Over the past two years, temperatures in Banff National Park have ranged from as low as minus 30 degrees Celsius to as high as 30 degrees above. The Banff Highway Service Centre did not experience difficulty using biodiesel during this time and have demonstrated that B5 is fully operable in a range of winter conditions.



CONTACT INFORMATION

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