# Recommendation for Biodiesel Mandate and Definitional Distinction from Petroleum Diesel

Presented by Josh Griffin and Jessica Ferrato on behalf of Biodiesel of Las Vegas June 1, 2010

#### Overview of Biodiesel

Biodiesel is a clean burning alternative fuel, produced from domestic renewable resources. It contains no petroleum, but can be blended at any level with petroleum diesel to create a biodiesel blend. It can be used in diesel engines with little to no modifications. Biodiesel is biodegradable, nontoxic, and free of sulfur and aromatics. It is made through transesterification, a process where glycerin is separated from fat or vegetable oil. This process creates separation into two products, methyl esters (chemical name for biodiesel), and glycerin (byproduct that is sold to be used in soap and other products).

Biodiesel is the only alternative fuel to have fully completed the health effects testing requirements of the 1990 Clean Air Act Amendments. It is better for the environment because it is made from renewable resources and has lower emissions than petroleum diesel. The use of biodiesel decreases our dependency on foreign oil and contributes to local economies.

## Biodiesel of Las Vegas

Biodiesel of Las Vegas specializes in the production and resale of ASTM quality biodiesel harvested from various feedstocks. Their proven batching process allows them to use existing economically viable oils (vegetable oil, used cooking grease and animal fats) and future cellulosic and algae oils. In addition to proving alternative fuel distribution to retail fueling stations, BLV has produced biodiesel for the following organizations: Clark County School District, Nellis Air Force Base, University of Nevada Las Vegas, The Mining Industry, and 1000 of their own diesel powered pieces of equipment. By the end of 2004, BLV emerged as the first commercially viable biodiesel producing enterprise in Nevada. The original pilot plant successfully expanded its production capacity to 4.0 million gallons per year of ASTM quality biodiesel. In the spring of 2007, BLV began construction on a state-of-the-art biodiesel production facility. At maximum capacity, the BLV facility will be capable of producing over 100 million gallons per year of biofuel.

#### A Biodiesel Mandate

Seven states currently have biodiesel mandates. Minnesota and Washington currently have them in effect. The five that will be in effect as of July 1, 2010 include: Louisiana, Massachusetts, New Mexico, Oregon, and Pennsylvania.

We propose that Nevada joins this important economic and environmental trend and propose this interim committee adopt legislation that mandates the use biodiesel throughout Nevada accordingly:

1. That all diesel fuel sold or offered in the state of Nevada must contain at least 5% biodiesel by volume, one year after in-state production volume of 30 million gallons of biodiesel has been reached and sustained for three

- months on an annualized basis.
- That all diesel fuel sold or offered in the state of Nevada must contain at least 10% biodiesel by volume, one year after in-state production volume of 60 million gallons of biodiesel has been reached and sustained for three months on an annualized basis, provided vehicle manufacturers recognize engine warranties associated with the use of biodiesel blends of 10% or more.

### **Definitional Distinction from Petroleum Diesel**

NRS 366.022 currently defines bio-diesel in an industry standard way. Particularly, we suggest adding to that definition to more accurately comply with national standards to specify that biodiesel is defined as mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats which conform to ASTM D6751 specifications for use in diesel engines. Biodiesel refers to the pure fuel before blending with diesel fuel. Biodiesel blends are denoted as, "BXX" with "XX" representing the percentage of biodiesel contained in the blend (ie: B20 is 20% biodiesel, 80% petroleum diesel).

Additionally, we recommend that NRS 366.190 be amended to include a distinct taxation definition too. Currently, bio-diesel is taxed the same as petroleum diesel. While we are not currently recommending a rate change, we do think the committee should consider defining bio-diesel within its own distinct taxation class of alternative fuels.