

**Abstract:**

In this proposal Biofriendly Corporation is responding to the RFP # 03-R05. Released in March of 2003 by TCET. TCET wishes to identify and evaluate new emissions reducing technologies; to seek the approval of the United States Environmental Protection Agency for those technologies, and to facilitate the deployment of those technologies, and also to assist the Texas Commission on Environmental Quality and the United States Environmental Protection Agency in the process of ensuring credit for new, innovative and creative technological advancements.

Biofriendly Corporation is a company dedicated to the mission of developing and marketing environmentally friendly products that reduce polluting emissions from diesel and gasoline burning engines, and boilers of all kinds.

**The goal of this particular project will be to both demonstrate and verify (Using the EPA procedure) that the Biofriendly Green Plus fuel combustion catalyst does significantly reduce NOx and particulate emissions coming from "on road" and construction "of road" diesel engines.**

**The project objectives to meet this goal are:**

- 1) To finalize a testing series for the Green Plus Fuel Combustion catalyst added to Diesel #2 with the EPA verification manager Research Triangle Institute (RTI)
- 2) To design and plan the tests needed to win a verification statement from RTI/EPA using the Southwest Research Institute (SwRI) to run the tests.
- 3) To utilize SwRI as a subcontractor to perform the tests while Biofriendly staff, monitor the proceedings.
- 4) To analyze the test data and present it along with other third party data collected prior to this test series to EPA for review and eventual verification.
- 5) To present to TCET a plan for expansion of the verification to all diesel engine types and a plan to perform an on road fleet demonstration using a fleet based on the original engine family tested above in items 1 thru 4.

**Why use Biofriendly Homogenous Combustion Catalysts in Diesel Fuels?**

Over the last several years Biofriendly Corporation of the USA and its subsidiary Green Plus Limited in the UK have developed a series of liquid homogenous combustion catalysts (trade name Green Plus) that are fully miscible with diesel fuels and can be added to the fuel at very low levels (generally less than 50 ppm in the fuel)

These additives have been designed with two overriding principals in mind. The first is to produce a product that actually helps to reduce particulate and noxious gas emissions into the atmosphere and the second is to improve fuel economy in the process. We feel the numerous positive results achieved are indicative of what might be achieved by doing the EPA verification test series and thus allowing Biofriendly to commercialize Green Plus in Texas and reduce air pollution in Texas.

Biofriendly will use RTI to manage the verification process and SwRI to perform the EPA approved emissions testing on one "on road" and one "off road" engine. These subcontractors will ensure independent reliable results.

**The major benefit of performing these verification tests on two engine families will be a cost effective solution for reducing emissions in diesel engines used in Texas. In our calculations we used conservative estimates but still found that NOx emissions would be reduced between 12 and 34 tons per day in Texas between now and 2007, while the true cost of the Green Plus would be zero or negative because of its expected 7% or so fuel economy savings.**