

## **NTRD Program Disclaimers**

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**Texas Commission on Environmental Quality  
New Technology Research & Development (NTRD) Program  
Monthly Project Status Report**

Contract Number: 582-5-70807-0013

Grantee: Biofriendly Corporation

Date Submitted: 11-10-2006

Report for the **Monthly** period:

Starting Date October 1, 2006 Ending Date October 31, 2006

**Section I. Accomplishments** *(Please provide a bulleted list of project accomplishments as well as a description of their importance to the project.)*

Several planning meetings were held plan to continue development of the approach to CARB re verification of Biofriendly Green Plus.

A draft was completed of the preliminary protocol.

A letter of intent was delivered to CARB for their review.

Mr. Dunlap initiated conversations with personnel at CARB re our plans to determine their response to our letter of intent. Several questions were raised (See problems and solutions and work to be performed in next period)

Of the three Laboratories in California contacted and that agreed in principal to perform parts of the CARB protocols Mr. Adair has found that CEE of Fullerton does not have CARB acceptance or quality documents to perform fuel verifications on heavy duty diesel engines. So they cannot be used for this program

He found that Olson EcoLogic of Fullerton has performed such programs recently and those programs were accepted by CARB.

He also found that C-CERT of Riverside is discussing performing such programs with CARB but has not had one accepted recently. They informed us that the quality issues for such a program should eb resolved with CARB by Christmas.

Mr. Adair continued the process of looking for suitable engines from several ETV engine groups. A second Cummins engine was purchased. Three engines have been received.

Indicate which part of the Grant Activities as defined in the grant agreement, the above accomplishments are related to:

Task 1, 2.1 preparing for ETV process. Submission of preliminary and full protocols

Section II: Problems/Solutions

<p>Problem(s) Identified</p> <p><i>(Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)</i></p>	<ol style="list-style-type: none"> <li>1. The protocol approval process will probably take 6 months.</li> <li>2. The current expiration of the grant is December 31 2006. However the notice to proceed was dated May 15<sup>th</sup> 2006 and the grant contract documents say the work should be completed within 12 months of the notice to proceed.</li> <li>3. CARB requires some preliminary data to show the DOC with Green Plus will get close to the 25% reduction in PM or NOx required.</li> <li>4. Olson EcoLogic and C-CERT cannot begin any new projects due to work load before the New Year.</li> </ol>
<p>Proposed Solution(s)</p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<p>For 1 and 2. In keeping with the grant contract requirements we request the actual grant expiration date be moved to May 14<sup>th</sup> 2007 thus giving Biofriendly the full 12 months noted to get his project under way and hopefully completed.</p> <p>For 3 and 4. Olson Ecologic has agreed to perform a short preliminary run on the Detroit Series 60 (1990) engine before Christmas to generate proof of principal data required by CARB for our full application for verification.</p>

Action(s) Conducted and Results

*(Please describe the action(s) taken to resolve the problem(s) and its effect)*

N/A

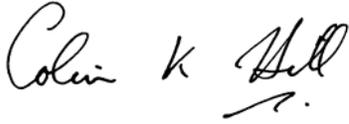
**Section III. Goals and Issues for Succeeding Period:** *(Please provide a brief description of the goal(s) you hope to realize in the coming period and identify any notable challenges that can be foreseen)*

Develop a partner contract with a DOC manufacturer to work together on CARB verification. They will supply the DOC and its specifications and any data already gathered on the DOC in use with ULSD on heavy-duty engines. This data will become part of the application package submitted to CARB

Perform proof of principal testing at Olson Ecologic to show that a DOC with Green Plus in the fuel can reach a twenty five percent reduction in either NOX or PM. This will be done using CFR and CARB approved protocols.

Set up meeting with CARB officials to discuss protocol

Identify fuel to be used, get it analyzed and then place an order to have it delivered early in the New Year.



\_\_\_\_\_ Date: 11-10-2006

*Authorized Project Representative's Signature*

**NOTE:** *Please attach any additional information that you feel should be a part of your report or that may be required to meet the deliverable requirements for tasks completed during this reporting period.*