NTRD Program Disclaimers

1. Disclaimer of Endorsement:

The posting herein of progress reports and final reports provided to TCEQ by its NTRD Grant Agreement recipients does not necessarily constitute or imply an endorsement, recommendation, or favoring by TCEQ or the State of Texas. The views and opinions expressed in said reports do not necessarily state or reflect those of TCEQ or the State of Texas, and shall not be used for advertising or product endorsement purposes.

2. Disclaimer of Liability:

The posting herein of progress reports and final reports provided to TCEQ by its NTRD Grant Agreement recipients does not constitute by TCEQ or the State of Texas the making of any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, and such entities do not assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information,apparatus, product, or process disclosed, or represent that its use would not infringe privately owned rights.

RECEIVED
DEC 13 2004
OFFICE OF ENVIRONMENTAL POLICY, ANALYSIS & ASSESSMENT

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

Contract Number: 582-5-65591-0011

Grantee: Cummins West, Inc. dba Cleaire Advanced Emission Controls, LLC

Date Submitted: December 9, 2004

Report for the **Monthly** period:

Starting Date November 1, 2004 Ending Date November 30, 2004

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

- Performed detailed project planning and determined critical path items.

  Getting Lonestar units in the field to accumulate durability hours and mileage is the critical path item for this project. This task is predicated on many other tasks that are currently in process such as freezing the product specification, fabricating units and identifying host sites for the in-the-field durability aging.

  Getting preliminary test data at Southwest Research Institute (SwRI) for the engine baseline and prototype Lonestar is also a near critical-path item. Cleaire submitted a request for quotation (RFQ) to SwRI for the initial set of tests.
- Initiated Cleaire's formal product development processes.

  Cleaire has created preliminary drafts of the technical profile, bill of materials, and Failure Modes Effects Analysis (FMEA) for the Lonestar.
- Evaluated system components and product goals in order to refine the design for Lonestar.

  Cleaire has determined the overall configuration for the Lonestar system. Some refinement to the bill of materials may occur as we progress through the product development process.

  As was identified in the first monthly report, the main challenge to this goal is the fact that the final evaluation of the emission components and system configuration cannot be definitively determined until after the durability mileage has been accumulated (typically 6+ months) and formal verification testing has been performed.
- Initiated discussions with an off-road engine manufacturer about acquiring an engine to use at SwRI for the off-road verification testing.

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

Article 1.1.3. and Article 2, Task 1: Construction of Lonestar systems.

Section II: Problems/Solutions

Problem(s) Identified *(Please report anticipated or unanticipated problem(s) encountered and its effect on the progress of the project)*	*None at this time*
Proposed Solution(s) *(Please report any possible solution(s) to the problem(s) that were considered/encountered)*	
Action(s) Conducted and Results *(Please describe the action(s) taken to resolve the problem(s) and its effect)*	

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)*

Goals for December 2004:

- Finalize an initial test plan with SwRI and reserve test cell time for January 2005.
- Perform preliminary performance testing at the California Truck Testing Services (CaTTS) for the prototype Lonestar system.

The following goals are continued from November and ongoing:

- Identify host vehicles and contact owners' in preparation of installing test units for durability mileage accumulation.
- Continue Cleaire's formal product development processes for the Lonestar.
- Order parts to fabricate the verification test units.
- Begin drafting the pre-data verification application.
- Purchase engines (upon TCEQ approval of budget revision request) to be used for the verification testing.

William D. Bailey Date: 12/9/04

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.*