

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-M031

Grantee: Extengine Transport Systems, LLC

Date Submitted: 07/20/06

Report for the **Monthly** period:

Starting Date 06/01/06 Ending Date 6/30/06

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

Task 1: (all technical work is included in this task)

- Conducted teleconferences with EPA's Cliff Dean and ARB's Dean Bloudoff to discuss changes to the test plan and system design characteristics
- Discussed with Waste Management specific vehicles available for durability tests.
- Installed system on Cummins M11 for transient engine tests.

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

These accomplishments relate to preparation of test hardware and the initiation of testing. Work to date is required prior to start of testing. These charges are not reimbursable by the grant. A no-charge FSR is submitted with this report.

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"> 1) EPA/ARB review and program approval is taking longer than expected in part because EPA and ARB have different approval processes that are inconsistent in several areas. 2) Most or all of the durability must be conducted on-road rather than on engine dynamometers which will delay verification testing. 3) System backpressure remains high due to complexity of exhaust system.
<p>Proposed Solution(s)</p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<ol style="list-style-type: none"> 1) Begin on-road data collection and aging as soon as possible even without approval to start since both agencies want in-use data in order to confirm system functionality. 2) Obtain commitment for on-road durability from vehicle operator. 3) Additional testing may be required to resolve some questions, including system backpressure.
<p>Action(s) Conducted and Results</p> <p><i>(Please describe the action(s) taken to resolve the problem(s) and its effect)</i></p>	<ol style="list-style-type: none"> 1) Continuing negotiation between agencies on scope and approach – no resolution at this time. Awaiting a new inquiry letter from CARB. 2) Contact Waste Management to obtain a test vehicle in Southern California. No Mack E7 is available in WM's California vehicle fleet. The most common engine in California vehicles is the Cummins M11. (Extengine is preparing to test system on M11 for comparison to Mack E7 results) 3) Additional tests are being scheduled with alternate exhaust system configurations.

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:

- Obtain approval from EPA to begin on-road durability.
- Negotiate test protocol between RTI, SwRI, EPA and ARB

Issues:

- Resolution of ARB/EPA questions
- System backpressure is significantly higher than OE specification
- Verification criteria for SCR/DPF performance



July 20, 2006

Date: _____

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.*