

NTRD Program Disclaimers

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

Contract Number: 582-5-70807-0020

Grantee: OceanAir Environmental, LLC

Date Submitted: May 26, 2006

Report for the **Monthly** period:

Starting Date January 2006 Ending Date April 2006

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

1. Secured agreement with the manufacturer and supplier of locomotives – Electromotive Diesel
2. Selected the model of locomotive that is most prevalent in the industry (maximum application potential) as GP 38-2
3. Developed initial parts list concept
4. Completed initial testing at Southwest Research Institute for the CBOI injectors. Unsuccessful in meeting USEPA's Tier II limits for PM.
5. Abandoned the CBOI approach, pursuing Electronic Unit Injection (EUI) with very high pressure fuel injection, special pistons, and redesigned electronics software for retrofit to a mechanical locomotive engine
6. Making arrangements now to secure another test locomotive to be sent to EMD engineering center in La Grange for design, retrofit, and testing
7. All future emissions testing to be done at EMD, not Southwest Research Institute.
8. OceanAir has also entered into an Agreement with Rail Systems, Inc. to supply parts.

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

Task 2.1.1.1 – Partner companies are Electromotive Diesel and Rail Systems, Inc.

Task 2.2.1.2 – Agreement with RSI

Task 2: Emissions Testing at Southwest Research Institute

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>	<p>a locomotive was retrofitted with CBOI injectors and speed up gears. NOx was within Tier II but PM was much above the Tier II limits.</p>
<p>Proposed Solution(s)</p> <p><i>(Please report any possible solution(s) to the problem(s) that were considered/encountered)</i></p>	<p>Abandon CBOI approach, pursue EUI with EMD <i>All future design and emissions testing to be done at EMD</i></p>
<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>	<p><i>TO be done</i></p>

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)*

Apply the technology to a GP 38-2 or equivalent and test at EMD

Maheesh Patwar

May 26, 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.*