

US EPA ARCHIVE DOCUMENT

**Pre-Proposal for FY 2008 State Innovation Grant**  
**Rhode Island Department of Environmental Management**

**Project Summary Information**

**Project Title:** Promoting Implementation of Innovative Environmental Compliance Strategies in the Northeast and Use of Common Business Sector Performance Measures

**Project Lead State/Applicant:** Rhode Island Department of Environmental Management in partnership with the Northeast Waste Management Officials' Association (NEWMOA)<sup>1</sup>

**Participating States:** Connecticut Department of Environmental Protection, New Hampshire Department of Environmental Services, Rhode Island Department of Environmental Management, Vermont Department of Environmental Conservation

**Learning States:** New Jersey Department of Environmental Protection, New York State Department of Environmental Conservation

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**Focus Areas:** Promoting Business Sector Performance Measurement on a Multi-State Basis; Improving Environmental Performance Using Environmental Results Program (ERP) Tools and Methods

**Total Funds Requested from EPA:** \$200,000

**Funded or Executed with Other Federal Programs:** Not applicable

**Project Period:** 2 years

**Special Federal Flexibility needed to implement the project:** None

**Statement by RIDEM Director of Support for the Project:** Faxed separately

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<sup>1</sup> NEWMOA is a non-profit, non-partisan interstate governmental association. Their membership is composed of state environmental agency directors of the pollution prevention, hazardous and solid waste, and waste site cleanup programs in CT, ME, MA, NH, NJ, NY, RI, and VT. NEWMOA's mission is to develop and sustain an effective partnership of states to explore, develop, promote, and implement environmentally sound solutions for the reduction and management of materials and waste, and for the remediation of contaminated sites, in order to achieve a clean and healthy environment. For more information visit: [www.newmoa.org](http://www.newmoa.org).

## Project Narrative

### Background

For the past few years, a number of the Northeast states have begun to actively employ a wide variety of traditional and innovative approaches to environmental compliance, enforcement, and assistance. These initiatives involve experimenting with various combinations of regulatory and non-regulatory tools to drive environmental performance improvements within identified regulated sectors and groups. Although state agencies currently collect information about various aspects of their activities and the general performance of certain sectors, there is seldom an accurate basis for drawing group performance conclusions and limited ability to compare the differences in group performance levels between two or more states working on a common sector or group. Adopting a common approach to measuring the environmental performance status of specific business sectors and groups holds great potential for enabling states to compare the effectiveness and efficiency of differing state strategies for improving the compliance and environmental performance that group.

### Project Goals and Objectives

The Rhode Island Department of Environmental Management (RI DEM) and the other member state agencies of the Northeast Waste Management Officials' Association (NEWMOA) are seeking EPA assistance to support the development of core performance measures and indicators using the models of innovative compliance strategies, including the Environmental Results Program (ERP) and statistically valid compliance/performance rate approaches for particular business sectors or regulated groups. RI DEM is the lead state and grant applicant. Project goals:

- Improve the ability of state environmental agencies to develop, implement, and analyze innovative performance measures for targeted business sectors
- Improve the ability of the state environmental agencies to develop and implement innovative compliance strategies, including ERP

Project objectives:

- develop and implement a common, core set of performance measures for business sectors on a multi-state basis
- promote the implementation of innovative compliance strategies, including ERP, in the states in the Northeast that have not yet begun these initiatives, including New York and New Jersey
- combine and present the environmental outcome data that is collected from the states using the core performance measures for at least one business sector and analyze and present the results

Anticipated project results:

- illuminate the nature, scope, and seriousness of problems within each selected sector;
- quantify environmental improvements or changes in the selected sectors;
- record group environmental performance status and changes over time;
- and facilitate general comparisons of the effectiveness and efficiency of different state performance enhancement strategies within the same sector.

The project will also enable participating states to better focus their limited resources on specific problem areas and to use those strategies that have been demonstrated to achieve the greatest environmental results improvements in the future.

Of seven Northeast states, five will be involved in this project as full participants: Connecticut, Massachusetts, New Hampshire, Rhode Island, and Vermont. These five “participating” states have already initiated an ERP or innovative compliance program and are interested in coordinating on a set of core performance measures. Massachusetts, Rhode Island and Vermont are implementing ERP initiatives directed at several business sectors, including printers, dry cleaners, photo processors, small boilers, industrial wastewater holding tanks, dental practices handling mercury, auto salvage yards, auto body shops, and facilities with underground storage tanks. Connecticut and New Hampshire have developed innovative strategies for promoting and improving compliance among RCRA generators by developing methods of evaluating statistically valid compliance rates combined with improved compliance assistance directed toward areas of high non-compliance.

New York and New Jersey will be involved in the project as “learning” states, since they are beginning to consider developing ERPs or similar programs and are eager to learn and benefit from the experience in the other states. This project would be a vehicle for them to more quickly and efficiently develop their initiatives.

The five participating states will evaluate and use, as appropriate, statistical performance measurement methods to enhance confidence in the reliability and accuracy of collected performance data. These statistical methods will enable the participants to accurately evaluate performance data for selected sectors without requiring every facility within groups to be inspected or otherwise evaluated. The statistical methods would also enable the participating states to draw accurate inferences as to each group’s compliance status (with respect to selected indicators) and overall performance level.

Participation (as a full “participating” state or “learning” state) in the project will be open to other states that currently employ ERP or are considering an ERP.

### **Connection to EPA’s Strategic Goals**

EPA’s Strategic Goal 5, Objectives 5.1 and 5.2 commit EPA to increase compliance and improve environmental performance through pollution prevention and innovation. This project addresses these objectives by supporting the development of a multi-state approach to implementing and analyzing strategies that effectively combine multi-media compliance improvement and pollution prevention on a sector basis. The ERP approach promotes innovation in permitting by enabling states to implement streamlined programs that emphasize sector-wide performance without the need for site-specific individual permits for large numbers of relatively small entities. It promotes improved compliance by providing the necessary tools for sectors to achieve results and is based on a rigorous statistically valid method for tracking compliance and beyond compliance practices. The compliance assistance and performance measures that states plan to develop and implement through this project would be multi-media and compliance-based, with an emphasis on encouraging pollution prevention and best management practices.

## Summary Work Plan

Key steps:

1. Identify and select up to three business sectors for performance measurement
2. Select group environmental performance indicators
3. Decide on use of statistical methodologies
4. Develop a data management strategy
5. Collect, evaluate, and report data to NEWMOA for aggregation
6. Report results to EPA

### Step 1: Identify and select business sectors and groups for performance measurement

In FY2004, NEWMOA formed an Innovative Compliance Strategies Workgroup including representatives from each of the NEWMOA state environmental agencies – both “participating” and “learning” states. Members of the Workgroup are actively involved with managing and staffing their states’ innovative compliance strategies projects, including ERP. This Workgroup would play a key role in overseeing and managing NEWMOA efforts on this project.

NEWMOA will survey members of the Workgroup to identify which sectors they are currently targeting for ERP and plan to target as a basis for selecting the business sectors for the focus of this project. NEWMOA will also catalog all of the performance indicators that the states have already developed and are using in their innovative compliance strategies projects. Significant consideration will be given to the Auto Body Sector and the new Federal Regulation for **Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources**.

Once this survey is completed, NEWMOA will convene a face-to-face meeting of the Workgroup to review results, make plans for the project, and select up to three sectors for regional performance measurement. The initial business sectors that have already been discussed as possibilities are, automotive facilities (including auto body, repair and salvage shops), and facilities with underground storage tanks. In an initial survey of NEWMOA states, these business sectors appeared to have the highest degree of common interest. If selected, **the auto body sector would focus on improving multi-media environmental performance and include the new requirements for national emission standards for hazardous air pollutants (NESHAP).**

The “learning” states— New Jersey and New York – will participate in conference calls, meetings and related project activities to learn more about measurement tools and uses to increase overall state capability to develop and implement performance measurement-based programs. In the future, the “learning states” may join the participating states’ work and use similar measurement approaches.

After the initial meeting, NEWMOA will compile and summarize for the seven states and EPA all of the available checklists, guidance documents and other project materials related to state ERP and innovative performance-based compliance projects in the selected sectors. Based on the business sectors that are selected, the Workgroup will form sub-groups of key staff working on each business sector for more in-depth information sharing, coordination and development of key performance measures. Throughout the rest of the first year of the project, NEWMOA will convene Workgroup conference calls every two to three months or more frequently, as needed.

### Step 2: Select group environmental performance indicators

Once NEWMOA has compiled and shared all of the performance measures that states have developed for the selected business sectors in Step 1, the association will review them to identify common characteristics and potential gaps.

Each of the business sector sub-groups will convene one or two conference calls to review in detail the list of sector performance measures and decide upon a final core list for the full Workgroup's consideration and adoption. The proposed measures will also be shared with and reviewed by the NEWMOA Board of Directors during one of its regular meetings. The Workgroup may modify the sector lists based on NEWMOA Director feedback.

### Step 3: Decide on use of statistical methodologies

All participating states have received training for four ERP analysis automation tools: inspection checklist data management and analysis, environmental performance results presentation, environmental performance statistical analysis, and environmental outcome analysis. If needed, NEWMOA will convene a training session for the Workgroup and other interested state staff to learn statistical techniques and software tools. NEWMOA will procure the services of a contractor to help with this training and to assist individual states as they implement statistical methods. NEWMOA staff will also be available to assist states with software tools and statistical approaches.

The Workgroup will review the various options for which statistical approaches are the most appropriate for measuring sector performance levels. If needed, the contractor will provide assistance through NEWMOA to states for specific issues and questions that may arise as they implement the statistical methods and use the new tools.

### Step 4: Develop a data collection and management strategy

The Workgroup will provide a forum for states to share information and techniques for data collection and management. Several states, including MA DEP and Rhode Island, have devised strategies for data collection and management under their ERPs. Connecticut recently hired a contractor to assist its efforts to evaluate compliance trends among RCRA generators in the states. These and other experienced states will share their methods with partner states and address any questions or concerns during face-to-face meetings of the Workgroup.

### Step 5: Collect, evaluate, and report data to NEWMOA

By the end of the project, NEWMOA will have a clear idea of the data elements and formats each state has used to collect and manage information, and will develop a strategy for collecting and aggregating data regionally. NEWMOA proposes to coordinate with the states on implementing this method for at least one of the targeted business sectors, with the assistance of a contractor. Data may be aggregated on a secure portion of NEWMOA's Web site and will be reported to EPA.

### Step 6: Report results to EPA

RI DEM and NEWMOA will prepare a project report for EPA that summarizes:

- results of the project, including the performance measures selected for each sector,



- statistical methodologies that the states are implementing to analyze the data,
- data collection and management approaches used by the states,
- data aggregation and analysis methods used by NEWMOA, and
- results of the aggregated data.

Drafts of this report will be shared with the Workgroup and NEWMOA Directors for review and comment prior to submission to EPA.

#### RI DEM's Role in the Project

- provide overall management and contracting with NEWMOA for support services
- share its ERP information tools and resource with other states
- actively participate in the Workgroup
- implement performance measures developed through the project in at least one sector

#### NEWMOA's Role in the Project

- organize and facilitate conference calls and meetings
- serve as a clearinghouse for assistance materials and facilitate the collection of performance results from participating states
- develop or refine proposals for selecting sectors and groups, set group performance goals and indicators, and compile project results
- organize measurement and statistical methodology training
- provide direct support to individual states
- collect and analyze aggregated performance data from multiple states
- assist in preparing project reports

The project team (participating states and NEWMOA) to the greatest extent possible will use existing participating state and EPA expertise, performance measurement, and other support tools and materials to undertake this project. However, grant funds will be needed to engage consultant(s) to assist states in implementing statistical methodologies and methods for data management, analyses, and reporting. NEWMOA and the contractor(s) will not use grant funds to develop new software applications.

#### Participating and Learning States' Role in the Project:

The "participating" states will:

- provide up-to-date assistance materials, performance measures and results
- provide training, support, and assistance to other states collectively and individually
- actively participate in Workgroup conference calls, meetings, and training sessions
- implement the performance measures in at least one sector and share the results through NEWMOA

The "learning" states will not directly participate in developing and implementing performance measurement strategies, but will participate in conference calls, meetings, and related project activities to learn more about the measurement tools and their uses to increase overall state

capabilities. In the future, these states may join participating states' project work and use the measurement approaches.

Contractor(s)' Role in the Project:

- provide training support on using statistical methods and existing software tools through the regional workshop and one-on-one assistance with individual states
- assist NEWMOA with devising a method for efficiently aggregating performance measurement data from the states

**Project Reporting & Measurement:**

RI DEM will provide periodic project status reports to EPA, at least every six months or more frequently if required. RI DEM will present group performance results as described in the project narrative above to EPA in these reports and in the final project report. In the final report, RI DEM and NEWMOA will present aggregated performance measurement outcome data for at least one of the targeted sectors.

**Project Milestones: (assuming project starts October 1, 2008 and end September 30, 2010)**

- Collect existing state materials and performance measures – October 2008
- Conduct project organization and kick-off meeting – November 2008
- Finalize sector group selection – November 2008
- Finalize performance indicators for selected sectors – March 2009
- Workshop on Statistical Methodologies – Winter 2009
- Share statistical methods and data collection and management – April 2009
- 1<sup>st</sup> progress report to EPA – April 2009
- States implement performance measures – Spring – Fall 2009
- 2<sup>nd</sup> progress report to EPA – Fall 2009
- Develop regional aggregation methodology – Fall 2009
- Workgroup face-to-face meeting to discuss the status of the project – Fall 2009
- Collect data from the states and implement regional aggregation tool – Winter 2010
- Summarize and present results of data aggregation – Summer 2010
- Draft final report summarizing group environmental performance results – July 2010
- Final progress report including summary of results to date, lessons learned and recommendations for future work – September 2010



**Pre-Proposal for FY 2008 State Innovation Grant Budget**  
Rhode Island Department of Environmental Management  
Budget Period: October 1, 2008 – September 30, 2010

*Financial Information removed by EPA as confidential business information.*

**Environmental Results Past Performance**

PROJECT	EPA SUPPORT	RESULTS
Auto Body Sector Environmental Results Program	No	Training for approximately 20% of the regulated universe; 50% participation rate with the voluntary program; Significant reductions in exposure to auto sanding dust and methylene chloride; statistically significant improved compliance with 24 EBPIs; a paper authored by OTCA staff has been accepted for publication in the <i>American Journal for Public Health</i> .
Underground Storage Tank Environmental Results Program	Yes – approximately \$70,000 in Contractor Services provided by EPA Region 1	Conducted 6 training sessions with approximately 125 facilities represented (approximately 18% of regulated universe); 91% participation rate with mandatory program; average 74% baseline compliance with 16 selected EBPIs; developed and implementing mobile inspection program using Tablet PCs; Computation of statistically significant improvement rates underway
Exterior Lead Paint Removal Contractor Environmental Results Program	Yes - \$35,000 Grant from EPA Region 1	Developed industry work book and check list; Issued 49 Certificates of Participation, Posted informative web site; conducting inspection program to measure compliance; second certification round in 2007
Amalgam Separator Environmental Results Program	No	Developed electronic check list with Program Partner (Narragansett Bay Commission) <a href="http://RI.gov">RI.gov</a> : <a href="#">Survey</a> : <a href="#">Survey #47: DEM Dental Amalgam Mercury Recycling Certification Form</a> ; program is underway with approximately 30% of dental facilities participating at this time.

Auto Salvage Sector Environmental Results Program	Yes -\$200,000 EPA State Innovations Grant	Developed industry work book and check list, completed 35 random baseline inspections, stakeholder meetings completed; certification conducted - 2007
States Common Measures Project	Yes - \$250,000 EPA State Innovations Grant	RI is a full participating state, completed training on statistical analysis using CADMUS tools, selecting sectors and EBPIs.

## Programmatic Capability

### Underground Storage Tanks Environmental Results Program

EPA Support: approximately \$70,000 in contractor assistance

DEM was technically able to successfully manage and carry out the agreement by:

- ✓ Convening a stake holder process with industry representatives to develop a work book based on the federal model and a check list. The check list was substantially organized by the industry stake holder group to meet their needs.
- ✓ Implement a training program with the assistance of the EPA contractor. DEM and the contractor held six training sessions over a two month period at various locations in Rhode Island.
- ✓ Conduct random and targeted inspections to establish base line conditions and ensure program compliance.
- ✓ Develop and implement a statistical analysis of check list questions to measure compliance.

DEM met the reporting requirements for this project by producing the work book and check list on time, conducting the stake holder meetings, and implementing the program in a timely manner. Rhode Island is the first state to use ERP in the UST sector.

### Auto Salvage Yard Environmental Results Program

EPA Support: \$200,000 State Innovation Grant

DEM continues to be technically able to successfully manage and carry out the agreement by:

- ✓ Developed a multi-media work book and check list for compliance with Air, Water and Waste compliance requirements.
- ✓ Conducting more than 30 base line inspections
- ✓ Completed the stake holder process in early 2007.
- ✓ Certification checklists completed and submitted in fall 2007

DEM is meeting the reporting requirements for this project through the submission of timely quarterly reports. This project is on schedule and has met or exceeded all grant commitments.

Underground Storage Tanks – Alternative Inspection Programs and the U.S. Energy Policy Act of 2005

EPA Support: \$250,000 State Innovation Grant

The project period began on January 1, 2007. A kick off meeting was held with project partners on January 5, 2007.

States Common Measures Project

EPA Support: \$255,000 State Innovation Grant (MA DEP and NEWMOA)

RIDEM is a “participating state” and participated in all aspects of the grant.