

US EPA ARCHIVE DOCUMENT



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Office of Technical & Customer Assistance

Quarterly Project Report

**Project Title:** *MS4 Construction Site Runoff Control Environmental Results Program*

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**Reporting Period:** January 1, 2011 to March 31, 2011

**Project Description:** The Construction Site Runoff Control minimum control measure is one of six measures that the operator of a Phase II regulated small municipal separate storm sewer system (MS4) is required to include in its stormwater management program to meet conditions of its Rhode Island Pollutant Discharge Elimination System (RIPDES) permit. The Department of Environmental Management (DEM) works with 34 Storm Water Coordinators to implement the requirements of the Phase II Final Rule. The DEM amended the RIPDES Regulations on February 5, 2003 to include the Phase II requirements for the MS4s. The regulations require MS4s to comply with six Minimum Control Measures. This grant proposal presents an ERP approach to self-certify compliance with, confirm compliance with, and measure compliance with the Construction Site Runoff Control Minimum Control Measure. DEM, working with the University of Rhode Island, will develop a mandatory self-certification program for construction site owners/operators using ERP tools for the use of BMPs to control erosion and sedimentation from construction sites greater than one acre.

**Problem Statement - MS4s in Rhode Island:**

This grant will address the specific problem of noncompliance with the requirements of the Rhode Island General Permit for Stormwater Associated with Construction Activity and local erosion and sediment control ordinances. The Stormwater Phase II Final Rule for Construction Site Runoff Control Minimum Control Measure (Specific link to EPA's Strategic Goal 2 – Clean and Safe Water) requires municipalities to develop Qualified Local Programs (QLPs) and perform inspections of 100% of constructions activities greater than one acre within their jurisdiction. Diminishing resources at the federal, state and local levels is making it much more difficult for MS4 operators to implement compliance and inspection programs. This project will develop an ERP model as a means of satisfying the small MS4 General Permit requirements.

**Project Activities Completed During Reporting Period:**

- Attended training workshops on January 13 and 18, 2011 for implementation of new storm water manual.

- Held meeting on January 20, 2011 to finalizing the ERP language in the 2011 RIPDES Construction General Permit.
- Updated the ERP Workbook/check list to be consistent with new storm water design manual. New version is attached.
- The stormwater checklist is currently being implemented on a voluntary basis. The check list has been included with 45 permits issued within the last six months.
- It should be noted that the recent economic downturn has resulted in a significant reduction in permit applications received and notices of construction start ups. For example freshwater wetland permit applications have gone from 567 in 2006 to a low of 249 in 2010. It is therefore anticipated that a request for a no cost increase extension will be required to allow the economy to recover and construction start ups to increase so that there is an adequate number of projects to randomly inspect and measure results from the baseline condition.

It is worth to continue noting the following as it has had a significant impact on stormwater management in Rhode island:

- The Department of Environmental Management has filed new stormwater regulations that will dramatically impact the design of new development and redevelopment projects. The new regulations consists of a completely updated and expanded stormwater design and installation manual. The manual incorporates LID as the "industry standard" for development, representing a fundamental shift in how subdivisions and commercial projects are planned and designed. The manual also places greater emphasis and incorporates pollution prevention practices for stormwater controls during construction. The ERP check list will be updated in the next quarter to be consistent with the new Stormwater Manual. Additional information and the manual can be found at the DEM Stormwater website:

<http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/stwater/t4guide/desman.htm>

- No funds were spent this quarter.

	DEM	URI
Total Allocated	\$75,400.00	\$115,000.00
Spent Previously	\$15,800.00	\$102,193.00
Spent this Quarter (2 quarters)	\$12,800.00	\$2,440.00
Remaining	\$46,800.00	\$10,367.00

**Major Activities Planned for Next Quarter:**

- Work with URI to plan training program for users of the ERP check list. This will include construction industry personnel, consultants, and MS4 inspectors.
- Continue development of revised RIPDES Construction General Permit to include new stormwater manual elements and ERP requirements.

**Table 2: Schedule of major project tasks**

<b>Task Name</b>	<b>Task Description</b>	<b>Start Date</b>	<b>End Date</b>
Develop Compliance Check List	DEM, working with the University of Rhode Island, will develop a compliance check list based on the General Permit conditions for the use of BMPs to control erosion and sedimentation along with other requirements of the General Permit. The Check List will be modeled on the check lists successfully developed by this partnership for the Auto Body and Auto Salvage sectors. The check list will include a self-certification requirement for the General Permit notifiers.	10/07	<b>Completed</b>
Develop and submit QAPP	DEM and URI will work together to prepare the QAPP to ensure that data is properly collected and assessed. The QAPP will include a description of how the number of random inspections for baseline and post certification conditions is calculated.	10/07	<b>Completed</b>
Complete QAPP Revisions	DEM will revise QAPP based on comments received from EPA review	1/08	<b>Completed</b>
Develop Statistical Methodology	DEM will develop the statistical methodology to compare baseline inspection results to the post certification random inspection results, based on previous ERP sectors.	5/08	<b>Completed</b>
Develop Data Management Strategy	The RIPDES MIS staff will be engaged to develop a data management strategy to receive, store and analyze inspection data.	1/08	Delayed due to lack of available MIS staff
Estimate Universe	DEM will estimate the number of projects that will be regulated under this program by reviewing the number of Notifications of Intent received for coverage under the General Permit, on an annual basis, for the last three calendar years.	4/08	<b>Completed</b>
Determine Baseline Sample	Use the EPA ERP Results Analyzer to determine the number of random, baseline inspections needed to perform future EBPI measurements.	5/08	<b>Completed</b>
Conduct Base Line Inspections	Random, base line inspections will be performed by the DEM/URI partnership to determine compliance status with the check list parameters. A specific number of EBPIs will be selected based on the EPA Measurable Goals Guidance for Phase II Small MS4s and the results of the base line inspections.	5/05	<b>Completed.</b>
Develop Stakeholder Group	DEM and URI will solicit a number of past Notifiers, contractors, consultants, representatives from non-governmental organizations, and other interested parties for interest in joining a stakeholder group to review, comment, and advise on issues concerning this program.	5/08	<b>Completed</b>  <b>Meetings held on</b>

	One stakeholder group meeting will be held to discuss the draft check list. The remaining meetings will be held after baseline inspections are completed to ensure that no bias is introduced. We would schedule from two to four meetings throughout the development of the project to discuss specific milestones such, base line results, training programs, and inspection and enforcement strategies. Industry.		<b>February 11, 2010 and March 18, 2010</b>
Develop Training Work Shops	DEM and URI will develop a training program for past and prospective Notifiers, Storm Water Coordinators and industry representatives that would be subject to the self-certification inspection and the conducting of random and targeted inspections. The training will focus on how to conduct a self-inspection or random/targeted inspection using the check list, correct any deficiencies, use of the Return-to-Compliance forms, and other factors important to maintain compliance with the General Permit. The training will build on current programs for BMP design and implementation and the training under development by the collaborative arrangement among URI, DEM and the Department of Transportation to provide training and information tailored to municipalities. The training will be coordinated so that the URI, DOT collaborative will focus on training municipalities and the ERP training will focus on industry.	10/08	Under development  Sessions planned for winter 2011
Distribute Self-Certifications	DEM will distribute the final Check List with certification statements to all persons that submit a Notice of Intent for coverage under the General Permit. DEM will also provide check lists and certification statements to the Storm Water Coordinators for distribution to Notifiers in their respective MS4s. DEM will offer technical assistance in the form of phone call consultations, email questions on an as needed basis during this time period. DEM will investigate and develop cost estimates to establish a centralized data base for the electronic submission of all inspection check lists (self –certifications, random inspections, targeted inspections by both DEM and Storm Water Coordinators)	2/09	7/09  7/11
Develop Inspection Strategy & Conduct Training work Shops	DEM will work with the Storm Water Coordinators to develop an inspection strategy to ensure good and consistent data collection based on the number of random inspections needed (using the EPA ERP Results Analyzer) to measure performance of the EBPIs. DEM and URI will conduct the training program after the Check Lists are distributed and the regulated community has had a chance to become familiar with the program through the public stake holder process	2/09	7/09  Under development  12/2011
Determine Number of Random Samples and Conduct Random and Targeted Post-certification Inspections	The EPA Results Analyzer will be used to determine the number of random samples. DEM and the Storm Water Coordinators will conduct the random inspections and a select number of targeted inspections using the check list. All data will be gathered by DEM for statistical analysis.	8/09	4/10  1/11
Develop compliance	DEM and the Storm Water Coordinators will develop a compliance policy for enforcement to ensure that referrals are made using consistent information and actions are	11/09	4/10

Policy for Enforcement	taken on a consistent basis. The policy will identify the coordination between local and state responsibilities.		1/11
Project Reports	Quarterly and Final Project Reports	1/08	9/1012